



SEQUENCE LISTING

<110> Ruvkun, Gary
Ogg, Scott

<120> THERAPEUTIC AND DIAGNOSTIC TOOLS FOR
IMPAIRED GLUCOSE TOLERANCE CONDITIONS

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<140> 09/205,658

<141> 1998-12-03

<150> 08/857,076

<151> 1997-05-15

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<151> 1997-07-07

<150> US98/10080

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Arg	Gly	Tyr	Ser	Thr	Arg	Asn	Gln	Gly	Val	Leu	Phe	Gln	Asn	Leu	Ala	1010	1015	1020	
Asp	Gly	Arg	Tyr	Phe	Val	Ser	Val	Thr	Ala	Thr	Ser	Val	His	Gly	Ala	1025	1030	1035	104
Gly	Pro	Glu	Ala	Glu	Ser	Ser	Asp	Pro	Ile	Val	Val	Met	Thr	Pro	Gly	1045	1050	1055	
Phe	Phe	Thr	Val	Glu	Ile	Ile	Leu	Gly	Met	Leu	Leu	Val	Phe	Leu	Ile	1060	1065	1070	
Leu	Met	Ser	Ile	Ala	Gly	Cys	Ile	Ile	Tyr	Tyr	Tyr	Ile	Gln	Val	Arg	1075	1080	1085	
Tyr	Gly	Lys	Lys	Val	Lys	Ala	Leu	Ser	Asp	Phe	Met	Gln	Leu	Asn	Pro	1090	1095	1100	
Glu	Tyr	Cys	Val	Asp	Asn	Lys	Tyr	Asn	Ala	Asp	Asp	Trp	Glu	Leu	Arg	1105	1110	1115	112
Gln	Asp	Asp	Val	Val	Leu	Gly	Gln	Gln	Cys	Gly	Glu	Gly	Ser	Phe	Gly	1125	1130	1135	
Lys	Val	Tyr	Leu	Gly	Thr	Gly	Asn	Asn	Val	Val	Ser	Leu	Met	Gly	Asp	1140	1145	1150	
Arg	Phe	Gly	Pro	Cys	Ala	Ile	Lys	Ile	Asn	Val	Asp	Asp	Pro	Ala	Ser	1155	1160	1165	
Thr	Glu	Asn	Leu	Asn	Tyr	Leu	Met	Glu	Ala	Asn	Ile	Met	Lys	Asn	Phe	1170	1175	1180	
Lys	Thr	Asn	Phe	Ile	Val	Gln	Leu	Tyr	Gly	Val	Ile	Ser	Thr	Val	Gln	1185	1190	1195	120
Pro	Ala	Met	Val	Val	Met	Glu	Met	Met	Asp	Leu	Gly	Asn	Leu	Arg	Asp	1205	1210	1215	
Tyr	Leu	Arg	Ser	Lys	Arg	Glu	Asp	Glu	Val	Phe	Asn	Glu	Thr	Asp	Cys	1220	1225	1230	
Asn	Phe	Phe	Asp	Ile	Ile	Pro	Arg	Asp	Lys	Phe	His	Glu	Trp	Ala	Ala	1235	1240	1245	
Gln	Ile	Cys	Asp	Gly	Met	Ala	Tyr	Leu	Glu	Ser	Leu	Lys	Phe	Cys	His				

1250	1255	1260
Arg Asp Leu Ala Ala	Arg Asn Cys Met Ile Asn Arg Asp Glu Thr Val	
1265	1270	1275
Lys Ile Gly Asp Phe Gly Met Ala Arg Asp Leu Phe Tyr His Asp Tyr		128
	1285	1290
Tyr Lys Pro Ser Gly Lys Arg Met Met Pro Val Arg Trp Met Ser Pro		1295
	1300	1305
Glu Ser Leu Lys Asp Gly Lys Phe Asp Ser Lys Ser Asp Val Trp Ser		1310
	1315	1320
Phe Gly Val Val Leu Tyr Glu Met Val Thr Leu Gly Ala Gln Pro Tyr		1325
	1330	1335
Ile Gly Leu Ser Asn Asp Glu Val Leu Asn Tyr Ile Gly Met Ala Arg		1340
1345	1350	1355
Lys Val Ile Lys Lys Pro Glu Cys Cys Glu Asn Tyr Trp Tyr Lys Val		136
	1365	1370
Met Lys Met Cys Trp Arg Tyr Ser Pro Arg Asp Arg Pro Thr Phe Leu		1375
	1380	1385
Gln Leu Val His Leu Leu Ala Ala Glu Ala Ser Pro Glu Phe Arg Asp		1390
	1395	1400
Leu Ser Phe Val Leu Thr Asp Asn Gln Met Ile Leu Asp Asp Ser Glu		1405
	1410	1415
Ala Leu Asp Leu Asp Asp Ile Asp Asp Thr Asp Met Asn Asp Gln Val		1420
1425	1430	1435
Val Glu Val Ala Pro Asp Val Glu Asn Val Glu Val Gln Ser Asp Ser		144
	1445	1450
Glu Arg Arg Asn Thr Asp Ser Ile Pro Leu Lys Gln Phe Lys Thr Ile		1455
	1460	1465
Pro Pro Ile Asn Ala Thr Thr Ser His Ser Thr Ile Ser Ile Asp Glu		1470
	1475	1480
Thr Pro Met Lys Ala Lys Gln Arg Glu Gly Ser Leu Asp Glu Glu Tyr		1485
	1490	1495
Ala Leu Met Asn His Ser Gly Gly Pro Ser Asp Ala Glu Val Arg Thr		1500
1505	1510	1515
Tyr Ala Gly Asp Gly Asp Tyr Val Glu Arg Asp Val Arg Glu Asn Asp		152
	1525	1530
Val Pro Thr Arg Arg Asn Thr Gly Ala Ser Thr Ser Ser Tyr Thr Gly		1535
	1540	1545
Gly Gly Pro Tyr Cys Leu Thr Asn Arg Gly Gly Ser Asn Glu Arg Gly		1550
	1555	1560
Ala Gly Phe Gly Glu Ala Val Arg Leu Thr Asp Gly Val Gly Ser Gly		1565
	1570	1575
His Leu Asn Asp Asp Asp Tyr Val Glu Lys Glu Ile Ser Ser Met Asp		1580
1585	1590	1595
Thr Arg Arg Ser Thr Gly Ala Ser Ser Ser Ser Tyr Gly Val Pro Gln		160
	1605	1610
Thr Asn Trp Ser Gly Asn Arg Gly Ala Thr Tyr Tyr Thr Ser Lys Ala		1615
	1620	1625
Gln Gln Ala Ala Thr Ala Ala Ala Ala Ala Ala Ala Leu Gln Gln		1630
	1635	1640
Gln Gln Asn Gly Gly Arg Gly Asp Arg Leu Thr Gln Leu Pro Gly Thr		1645
	1650	1655
Gly His Leu Gln Ser Thr Arg Gly Gly Gln Asp Gly Asp Tyr Ile Glu		1660
1665	1670	1675
Thr Glu Pro Lys Asn Tyr Arg Asn Asn Gly Ser Pro Ser Arg Asn Gly		168
	1685	1690
Asn Ser Arg Asp Ile Phe Asn Gly Arg Ser Ala Phe Gly Glu Asn Glu		1695
	1700	1705
His Leu Ile Glu Asp Asn Glu His His Pro Leu Val		1710
	1715	1720

<210> 13
 <211> 139
 <212> PRT
 <213> Caenorhabditis elegans

<400> 13
 Thr Ser Gly Ser Gly Met Gly Pro Thr Thr Leu His Lys Leu Thr Ile
 1 5 10 15
 Gly Gly Gln Ile Arg Leu Thr Gly Arg Val Gly Ser Gly Arg Phe Gly
 20 25 30
 Asn Val Ser Arg Gly Asp Tyr Arg Gly Glu Ala Val Ala Val Lys Val
 35 40 45
 Phe Asn Ala Leu Asp Glu Pro Ala Phe His Lys Glu Thr Glu Ile Phe
 50 55 60
 Glu Thr Arg Met Leu Arg His Pro Asn Val Leu Arg Tyr Ile Gly Ser
 65 70 75 80
 Asp Arg Val Asp Thr Gly Phe Val Thr Glu Leu Trp Leu Val Thr Glu
 85 90 95
 Tyr His Pro Ser Gly Ser Leu His Asp Phe Leu Leu Glu Asn Thr Val
 100 105 110
 Asn Ile Glu Thr Tyr Tyr Asn Leu Met Arg Ser Thr Ala Ser Gly Leu
 115 120 125
 Ala Phe Leu His Asn Gln Ile Gly Gly Ser Lys
 130 135

<210> 14
 <211> 62
 <212> PRT
 <213> Caenorhabditis elegans

<400> 14
 Glu Asp Ala Ala Ser Asp Ile Ile Ala Asn Glu Asn Tyr Lys Cys Gly
 1 5 10 15
 Thr Val Arg Tyr Leu Ala Pro Glu Ile Leu Asn Ser Thr Met Gln Phe
 20 25 30
 Thr Val Phe Glu Ser Tyr Gln Cys Ala Asp Val Tyr Ser Phe Ser Leu
 35 40 45
 Val Met Trp Glu Thr Leu Cys Arg Cys Glu Asp Gly Asp Val
 50 55 60

<210> 15
 <211> 31
 <212> PRT
 <213> Caenorhabditis elegans

<400> 15
 Lys Pro Ala Met Ala His Arg Asp Ile Lys Ser Lys Asn Ile Met Val
 1 5 10 15
 Lys Asn Asp Leu Thr Cys Ala Ile Gly Asp Leu Gly Leu Ser Leu
 20 25 30

<210> 16
 <211> 72
 <212> PRT
 <213> Caenorhabditis elegans

<400> 16
 Ile Pro Tyr Ile Glu Trp Thr Asp Arg Asp Pro Gln Asp Ala Gln Met
 1 5 10 15
 Phe Asp Val Val Cys Thr Arg Arg Leu Arg Pro Thr Glu Asn Pro Leu
 20 25 30
 Trp Lys Asp His Pro Glu Met Lys His Ile Met Glu Ile Ile Lys Thr
 35 40 45
 Cys Trp Asn Gly Asn Pro Ser Ala Arg Phe Thr Ser Tyr Ile Cys Arg
 50 55 60
 Lys Arg Met Asp Glu Arg Gln Gln
 65 70

<210> 17
 <211> 150
 <212> PRT
 <213> Caenorhabditis elegans

<400> 17
 Tyr Phe Glu Ser Val Asp Arg Phe Leu Tyr Ser Cys Val Gly Tyr Ser
 1 5 10 15
 Val Ala Thr Tyr Ile Met Gly Ile Lys Asp Arg His Ser Asp Asn Leu
 20 25 30
 Met Leu Thr Glu Asp Gly Lys Tyr Val His Ile Asp Phe Gly His Ile
 35 40 45
 Leu Gly His Gly Lys Thr Lys Leu Gly Ile Gln Arg Asp Arg Gln Pro
 50 55 60
 Phe Ile Leu Thr Glu His Phe Met Thr Val Ile Arg Ser Gly Lys Ser
 65 70 75 80
 Val Asp Gly Asn Ser His Glu Leu Gln Lys Phe Lys Thr Leu Cys Val
 85 90 95
 Glu Ala Tyr Glu Val Met Trp Asn Asn Arg Asp Leu Phe Val Ser Leu
 100 105 110
 Phe Thr Leu Met Leu Gly Met Glu Leu Pro Glu Leu Ser Thr Lys Ala
 115 120 125
 Asp Leu Asp His Leu Lys Lys Thr Leu Phe Cys Asn Gly Glu Ser Lys
 130 135 140
 Glu Glu Ala Arg Lys Phe
 145 150

<210> 18
 <211> 113
 <212> PRT
 <213> Caenorhabditis elegans

<400> 18
 Ser Pro Leu Asp Pro Val Tyr Lys Leu Gly Glu Met Ile Ile Asp Lys
 1 5 10 15
 Ala Ile Val Leu Gly Ser Ala Lys Arg Pro Leu Met Leu His Trp Lys
 20 25 30
 Asn Lys Asn Pro Lys Ser Asp Leu His Leu Pro Phe Cys Ala Met Ile
 35 40 45
 Phe Lys Asn Gly Asp Asp Leu Arg Gln Asp Met Leu Val Leu Gln Val
 50 55 60
 Leu Glu Val Met Asp Asn Ile Trp Lys Ala Ala Asn Ile Asp Cys Cys
 65 70 75 80
 Leu Asn Pro Tyr Ala Val Leu Pro Met Gly Glu Met Ile Gly Ile Ile
 85 90 95

Glu Val Val Pro Asn Cys Lys Thr Ile Phe Glu Ile Gln Val Gly Thr
100 105 110
Gly

<210> 19
<211> 106
<212> PRT
<213> Caenorhabditis elegans

<400> 19
Leu Ala Phe Val Trp Thr Asp Arg Glu Asn Phe Ser Glu Leu Tyr Val
1 5 10 15
Met Leu Glu Lys Trp Lys Pro Pro Ser Val Ala Ala Ala Leu Thr Leu
20 25 30
Leu Gly Lys Arg Cys Thr Asp Arg Val Ile Arg Lys Phe Ala Val Glu
35 40 45
Lys Leu Asn Glu Gln Leu Ser Pro Val Thr Phe His Leu Phe Ile Leu
50 55 60
Pro Leu Ile Gln Ala Leu Lys Tyr Glu Pro Arg Ala Gln Ser Glu Val
65 70 75 80
Gly Met Met Leu Leu Thr Arg Ala Leu Cys Asp Tyr Arg Ile Gly His
85 90 95
Arg Leu Phe Trp Leu Leu Arg Ala Glu Ile
100 105

<210> 20
<211> 139
<212> PRT
<213> Caenorhabditis elegans

<400> 20
Glu Tyr Trp Ile Val Thr Glu Phe His Glu Arg Leu Ser Leu Tyr Glu
1 5 10 15
Leu Leu Lys Asn Asn Val Ile Ser Ile Thr Ser Ala Asn Arg Ile Ile
20 25 30
Met Ser Met Ile Asp Gly Leu Gln Phe Leu His Asp Asp Arg Pro Tyr
35 40 45
Phe Phe Gly His Pro Lys Lys Pro Ile Ile His Arg Asp Ile Lys Ser
50 55 60
Lys Asn Ile Leu Val Lys Ser Asp Met Thr Thr Cys Ile Ala Asp Phe
65 70 75 80
Gly Leu Ala Arg Ile Tyr Ser Tyr Asp Ile Glu Gln Ser Asp Leu Leu
85 90 95
Gly Gln Val Gly Thr Lys Arg Tyr Met Ser Pro Glu Met Leu Glu Gly
100 105 110
Ala Thr Glu Phe Thr Pro Thr Ala Phe Lys Ala Met Asp Val Tyr Ser
115 120 125
Met Gly Leu Val Met Trp Glu Val Ile Ser Arg
130 135

<210> 21
<211> 61
<212> PRT
<213> Caenorhabditis elegans

<400> 21
 Ile Gly Phe Asp Pro Thr Ile Gly Arg Met Arg Asn Tyr Val Val Ser
 1 5 10 15
 Lys Lys Glu Arg Pro Gln Trp Arg Asp Glu Ile Ile Lys His Glu Tyr
 20 25 30
 Met Ser Leu Leu Lys Lys Val Thr Glu Glu Met Trp Asp Pro Glu Ala
 35 40 45
 Cys Ala Arg Ile Thr Ala Gly Cys Ala Phe Ala Arg Val
 50 55 60

<210> 22
 <211> 20
 <212> PRT
 <213> Caenorhabditis elegans

<400> 22
 Pro Ile Thr Asp Phe Gln Leu Ile Ser Lys Gly Arg Phe Gly Lys Val
 1 5 10 15
 Phe Lys Ala Gln
 20

<210> 23
 <211> 163
 <212> PRT
 <213> Caenorhabditis elegans

<400> 23
 Thr Asp Ser Glu Thr Arg Ser Arg Phe Ser Leu Gly Trp Tyr Asn Asn
 1 5 10 15
 Pro Asn Arg Ser Pro Gln Thr Ala Glu Val Arg Gly Leu Ile Gly Lys
 20 25 30
 Gly Val Arg Phe Tyr Leu Leu Ala Gly Glu Val Tyr Val Glu Asn Leu
 35 40 45
 Cys Asn Ile Pro Val Phe Val Gln Ser Ile Gly Ala Asn Met Lys Asn
 50 55 60
 Gly Phe Gln Leu Asn Thr Val Ser Lys Leu Pro Pro Thr Gly Thr Met
 65 70 75 80
 Lys Val Phe Asp Met Arg Leu Phe Ser Lys Gln Leu Arg Thr Ala Ala
 85 90 95
 Glu Lys Thr Tyr Gln Asp Val Tyr Cys Leu Ser Arg Met Cys Thr Val
 100 105 110
 Arg Val Ser Phe Cys Lys Gly Trp Gly Glu His Tyr Arg Arg Ser Thr
 115 120 125
 Val Leu Arg Ser Pro Val Trp Phe Gln Ala His Leu Asn Asn Pro Met
 130 135 140
 His Trp Val Asp Ser Val Leu Thr Cys Met Gly Ala Pro Pro Arg Ile
 145 150 155 160
 Cys Ser Ser

<210> 24
 <211> 44
 <212> PRT
 <213> Caenorhabditis elegans

<400> 24

Arg Ala Phe Arg Phe Pro Val Ile Arg Tyr Glu Ser Gln Val Lys Ser
 1 5 10 15
 Ile Leu Thr Cys Arg His Ala Phe Asn Ser His Ser Arg Asn Val Cys
 20 25 30
 Leu Asn Pro Tyr His Tyr Arg Trp Val Glu Leu Pro
 35 40

<210> 25
 <211> 38
 <212> PRT
 <213> Caenorhabditis elegans

<400> 25
 Val Glu Tyr Glu Glu Ser Pro Ser Trp Leu Lys Leu Ile Tyr Tyr Glu
 1 5 10 15
 Glu Gly Thr Met Ile Gly Glu Lys Ala Asp Val Glu Gly His His Cys
 20 25 30
 Leu Ile Asp Gly Phe Thr
 35

<210> 26
 <211> 60
 <212> PRT
 <213> Caenorhabditis elegans

<400> 26
 Asn Leu Ala Glu Thr Gly His Ser Lys Ile Met Arg Ala Ala His Lys
 1 5 10 15
 Val Ser Asn Pro Glu Ile Gly Tyr Cys Cys His Pro Thr Glu Tyr Asp
 20 25 30
 Tyr Ile Lys Leu Ile Tyr Val Asn Arg Asp Gly Arg Val Ser Ile Ala
 35 40 45
 Asn Val Asn Gly Met Ile Ala Lys Lys Cys Gly Cys
 50 55 60

<210> 27
 <211> 20
 <212> PRT
 <213> Caenorhabditis elegans

<400> 27
 Asp Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala Tyr Met Cys Arg Gly
 1 5 10 15
 Asp Cys His Tyr
 20

<210> 28
 <211> 43
 <212> PRT
 <213> Caenorhabditis elegans

<400> 28
 Val Cys Asn Ala Glu Ala Gln Ser Lys Gly Cys Cys Leu Tyr Asp Leu
 1 5 10 15
 Glu Ile Glu Phe Glu Lys Ile Gly Trp Asp Trp Ile Val Ala Pro Pro

20 25 30
 Arg Tyr Asn Ala Tyr Met Cys Arg Gly Asp Cys
 35 40

<210> 29
 <211> 70
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 29
 Asp Cys His Tyr Asn Ala His His Phe Asn Leu Ala Glu Thr Gly His
 1 5 10 15
 Ser Lys Ile Met Arg Ala Ala His Lys Val Ser Asn Pro Glu Ile Gly
 20 25 30
 Tyr Cys Cys His Pro Thr Glu Tyr Asp Tyr Ile Lys Leu Ile Tyr Val
 35 40 45
 Asn Arg Asp Gly Arg Val Ser Ile Ala Asn Val Asn Gly Met Ile Ala
 50 55 60
 Lys Lys Cys Gly Cys Ser
 65 70

<210> 30
 <211> 35
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 30
 Cys Cys Leu Tyr Asp Leu Glu Ile Glu Phe Glu Lys Ile Gly Trp Asp
 1 5 10 15
 Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala Tyr Met Cys Arg Gly Asp
 20 25 30
 Cys His Tyr
 35

<210> 31
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Degenerate probe

<221> misc_feature
 <222> (1)...(23)
 <223> n = A,T,C or G

<400> 31
 ggntgggayt rnrtnrtnngc ncc

23

<210> 32
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Degenerate probe

<221> misc_feature
 <222> (1)...(18)
 <223> n = A,T,C or G

<400> 32
 tgytgynnnnc cnacngar

18

<210> 33
 <211> 127
 <212> PRT
 <213> Caenorhabditis elegans

<400> 33
 Lys Phe His Glu Trp Ala Ala Gln Ile Cys Asp Gly Met Ala Tyr Leu
 1 5 10 15
 Glu Ser Leu Lys Phe Cys His Arg Asp Leu Ala Ala Arg Asn Cys Met
 20 25 30
 Ile Asn Arg Asp Glu Thr Val Lys Ile Gly Asp Phe Gly Met Ala Arg
 35 40 45
 Asp Leu Phe Tyr His Asp Tyr Tyr Lys Pro Ser Gly Lys Arg Met Met
 50 55 60
 Pro Val Arg Trp Met Ser Pro Glu Ser Leu Lys Asp Gly Lys Phe Asp
 65 70 75 80
 Ser Lys Ser Asp Val Trp Ser Phe Gly Val Val Leu Tyr Glu Met Val
 85 90 95
 Thr Leu Gly Ala Gln Pro Tyr Ile Gly Leu Ser Asn Asp Glu Val Leu
 100 105 110
 Asn Tyr Ile Gly Met Ala Arg Lys Val Ile Lys Lys Pro Glu Cys
 115 120 125

<210> 34
 <211> 131
 <212> PRT
 <213> Caenorhabditis elegans

<400> 34
 Asn Thr Thr Cys Gln Lys Ser Cys Ala Tyr Asp Arg Leu Leu Pro Thr
 1 5 10 15
 Lys Glu Ile Gly Pro Gly Cys Asp Ala Asn Gly Asp Arg Cys His Asp
 20 25 30
 Gln Cys Val Gly Gly Cys Glu Arg Val Asn Asp Ala Thr Ala Cys His
 35 40 45
 Ala Cys Lys Asn Val Tyr His Lys Gly Lys Cys Ile Glu Lys Cys Asp
 50 55 60
 Ala His Leu Tyr Leu Leu Gln Arg Arg Cys Val Thr Arg Glu Gln
 65 70 75 80
 Cys Leu Gln Leu Asn Pro Val Leu Ser Asn Lys Thr Val Pro Ile Lys
 85 90 95
 Ala Thr Ala Gly Leu Cys Ser Asp Lys Cys Pro Asp Gly Tyr Gln Ile
 100 105 110
 Asn Pro Asp Asp His Arg Glu Cys Arg Lys Cys Val Gly Lys Cys Glu
 115 120 125
 Ile Val Cys
 130

<210> 35
 <211> 103

<212> PRT
 <213> Caenorhabditis elegans

<400> 35
 Phe Asp Gln Lys Ala Cys Glu Ser Leu Val Lys Lys Leu Lys Asp Lys
 1 5 10 15
 Lys Asn Asp Leu Gln Asn Leu Ile Asp Val Val Leu Ser Lys Gly Thr
 20 25 30
 Lys Tyr Thr Gly Cys Ile Thr Ile Pro Arg Thr Leu Asp Gly Arg Leu
 35 40 45
 Gln Val His Gly Arg Lys Gly Phe Pro His Val Val Tyr Gly Lys Leu
 50 55 60
 Trp Arg Phe Asn Glu Met Thr Lys Asn Glu Thr Arg His Val Asp His
 65 70 75 80
 Cys Lys His Ala Phe Glu Met Lys Ser Asp Met Val Cys Val Asn Pro
 85 90 95
 Tyr His Tyr Glu Ile Val Ile
 100

<210> 36
 <211> 79
 <212> PRT
 <213> Caenorhabditis elegans

<400> 36
 Asn Arg Tyr Ser Leu Gly Leu Glu Pro Asn Pro Ile Arg Glu Pro Val
 1 5 10 15
 Ala Phe Lys Val Arg Lys Ala Ile Val Asp Gly Ile Arg Phe Ser Tyr
 20 25 30
 Lys Lys Asp Gly Ser Val Trp Leu Gln Asn Arg Met Lys Tyr Pro Val
 35 40 45
 Phe Val Thr Ser Gly Tyr Leu Asp Glu Gln Ser Gly Gly Leu Lys Lys
 50 55 60
 Asp Lys Val His Lys Val Tyr Gly Cys Ala Ser Ile Lys Thr Phe
 65 70 75

<210> 37
 <211> 106
 <212> PRT
 <213> Caenorhabditis elegans

<400> 37
 Lys Lys Thr Thr Thr Arg Arg Asn Ala Trp Gly Asn Met Ser Tyr Ala
 1 5 10 15
 Glu Leu Ile Thr Thr Ala Ile Met Ala Ser Pro Glu Lys Arg Leu Thr
 20 25 30
 Leu Ala Gln Val Tyr Glu Trp Met Val Gln Asn Val Pro Tyr Phe Arg
 35 40 45
 Asp Lys Gly Asp Ser Asn Ser Ser Ala Gly Trp Lys Asn Ser Ile Arg
 50 55 60
 His Asn Leu Ser Leu His Ser Arg Phe Met Arg Ile Gln Asn Glu Gly
 65 70 75 80
 Ala Gly Lys Ser Ser Trp Trp Val Ile Asn Pro Asp Ala Lys Pro Gly
 85 90 95
 Met Asn Pro Arg Arg Thr Arg Glu Arg Ser
 100 105

<210> 38
 <211> 60
 <212> PRT
 <213> Caenorhabditis elegans

<400> 38
 Glu Ile Lys Leu Ser Asp Phe Lys His Gln Leu Phe Glu Leu Ile Ala
 1 5 10 15
 Pro Met Lys Trp Gly Thr Tyr Ser Val Lys Pro Gln Asp Tyr Val Phe
 20 25 30
 Arg Gln Leu Asn Asn Phe Gly Glu Ile Glu Val Ile Phe Asn Asp Asp
 35 40 45
 Gln Pro Leu Ser Lys Leu Glu Leu His Gly Thr Phe
 50 55 60

<210> 39
 <211> 2784
 <212> DNA
 <213> Caenorhabditis elegans

<400> 39
 atgaagctaa tagcaacttc tcttctagtt cccgacgagc acacaccgat gatgtcacca 60
 gtgaatacaa ctacaaagat tctacaacgg agtggattta aaatggaaat cccgccatat 120
 ttggatccag acagtcagga tgatgacccg gaagatgggt tcaactaccc ggatccagat 180
 ttatttgaca caaaaaacac aaatatgacc gagtacgatt tggatgtgtt gaagcttgga 240
 aaaccagcag tagatgaagc acggaaaaaag atcgaagttc cgcacgctag tgcgccgcca 300
 aacaaaattg tagaatatth gatgtattat agaacgttaa aagaaagtga actcatacaa 360
 ctgaatgctg atcggacaaa acgaaatcga ttatcgttga acttgggtcaa aaacaatatt 420
 gatcgagagt tcgaccaaaa agcttgcgag tccctgggtg aaaaattgaa ggataagaag 480
 aatgatctcc agaacctgat tgatgtggtt ctttcaaaag gtacaaaata taccggttgc 540
 attacaattc caaggacact tgatggccgg ttacaggtcc acggaagaaa aggtttccct 600
 cacgtagtct atggcaaact gtggaggttt aatgaaatga caaaaaacga aacgcgtcat 660
 gtggaccact gcaagcacgc atttgaaatg aaaagtgaca tggatatgct gaatccctat 720
 cactacgaaa ttgtcatttg aactatgatt gttgggcaga gggatcatga caatcgagat 780
 atgccgccgc cacatcaacg ctaccacact ccaggtcggc aggatccagt tgacgatatg 840
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 cagcctatgc ctcaacaatt gccttcagtt ggcgcaacgt ttgcccatcc tctcccacat 960
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 catcagggat atggaatgaa tgggccgagt tgctcttcag aaaacaacaa tccattccac 1140
 caaaatcacc attataatga tattagccat ccaaactact attcctacga ctgtgggtccg 1200
 aacttgtacg gggtttccaac tccttatccg gattttcacc atcctttcaa tcagcaacca 1260
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 gtcaccttg acgtgttccg tcggtactgt agacagacat ttggaaatcg attttttgaa 1440
 ggagaaagtg aacaatccgg cgcaataatt cggctctagta acaaattcat tgaagaattt 1500
 gattcgccga tttgtggtgt gacagttgtt cgaccgcgga tgacagacgg tgaggttttg 1560
 gagaacatca tgccggaaga tgcaccatat catgacattt gcaagttcat tttgaggctc 1620
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 gagccaaatc caattagaga accagtggcg ttttaaagttc gtaaagcaat agtggatgga 1860
 attcgttttt cctacaaaaa agacgggagt gtttggttcc aaaaccgcat gaagtaccgc 1920
 gtatttgtca cttctgggta tctcgacgag caatcaggag gcctaaagaa ggataaagtg 1980
 cacaaagttt acggatgtgc gtctatcaaa acgtttggct tcaacgtttc caaacaattc 2040
 atcagagacg cgcttctttc caagcaaatg gcaacaatgt acttgcaagg aaaattgact 2100
 ccgatgaatt atatctacga gaagaagact caggaagagc tgcgaaggga agcaacacgc 2160
 accactgatt cattggccaa gtactgttgt gtccgtgtct cgttctgcaa aggatttgga 2220

gaagcatacc	cagaacgccc	gtcaattcat	gattgtccag	tttggattga	gttgaaaatc	2280
aacattgcct	acgatttcat	ggattcaatc	tgccagtaca	taaccaactg	cttcgagccg	2340
ctaggaatgg	aagattttgc	aaaattggga	atcaacgtca	gtgatgacta	aatgataact	2400
tttttcactc	accctactag	atactgattt	agtcttattc	caaatcatcc	aacgatatca	2460
aactttttcc	tttgaacttt	gcatactatg	ttatcacaag	ttccaagcag	tttcaataca	2520
aacataggat	atgttaacaa	cttttgataa	gaatcaagtt	accaaactgtt	cattgtgagc	2580
tttgagctgt	atagaaggac	aatgtatccc	atacctcaat	ctttaatagt	catcagtcac	2640
tggtcccgca	ccaatttttt	cgattcgcat	atgtcatata	ttgcaccgtg	gcccttttta	2700
ttgtaacttt	taatatattt	tcttcccaac	ttgtgaatat	gattgatgaa	ccaccatttt	2760
gagtaataaa	tgtatttttt	gtgg				2784

<210> 40

<211> 796

<212> PRT

<213> Caenorhabditis elegans

<400> 40

Met	Lys	Leu	Ile	Ala	Thr	Ser	Leu	Leu	Val	Pro	Asp	Glu	His	Thr	Pro	
1				5					10					15		
Met	Met	Ser	Pro	Val	Asn	Thr	Thr	Thr	Lys	Ile	Leu	Gln	Arg	Ser	Gly	
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Lys	Pro	Ala	Val	Asp	Glu	Ala	Arg	Lys	Lys	Ile	Glu	Val	Pro	Asp	Ala	
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Ser	Ala	Pro	Pro	Asn	Lys	Ile	Val	Glu	Tyr	Leu	Met	Tyr	Tyr	Arg	Thr	
			100					105						110		
Leu	Lys	Glu	Ser	Glu	Leu	Ile	Gln	Leu	Asn	Ala	Tyr	Arg	Thr	Lys	Arg	
			115				120						125			
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	130					135					140					
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Tyr	Thr	Gly	Cys	Ile	Thr	Ile	Pro	Arg	Thr	Leu	Asp	Gly	Arg	Leu	Gln	
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	210					215					220					
Lys	His	Ala	Phe	Glu	Met	Lys	Ser	Asp	Met	Val	Cys	Val	Asn	Pro	Tyr	
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Gln	Ala	Pro	His	Asn	Pro	Gly	Val	Ser	His	Pro	Tyr	Ser	Ile	Ala	Pro	
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Pro	Ser	Cys	Ser	Ser	Glu	Asn	Asn	Asn	Pro	Phe	His	Gln	Asn	His	His
	370					375					380				
Tyr	Asn	Asp	Ile	Ser	His	Pro	Asn	His	Tyr	Ser	Tyr	Asp	Cys	Gly	Pro
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Val	Ala	Phe	Lys	Val	Arg	Lys	Ala	Ile	Val	Asp	Gly	Ile	Arg	Phe	Ser
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Tyr	Lys	Lys	Asp	Gly	Ser	Val	Trp	Leu	Gln	Asn	Arg	Met	Lys	Tyr	Pro
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Thr	Thr	Asp	Ser	Leu	Ala	Lys	Tyr	Cys	Cys	Val	Arg	Val	Ser	Phe	Cys
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 <213> Caenorhabditis elegans

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 35 40 45
 Glu Tyr Glu Arg Asn Leu Leu Gly Ala Gly Ala Gly Phe Asn Leu Leu
 50 55 60
 Asn Val Gly Asn Met Ala Asn Val Pro Asp Glu His Thr Pro Met Met
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 Ser Pro Val Asn Thr Thr Thr Lys Ile Leu Gln Arg Ser Gly Ile Lys
 85 90 95
 Met Glu Ile Pro Pro Tyr Leu Asp Pro Asp Ser Gln Asp Asp Asp Pro
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 Glu Asp Gly Val Asn Tyr Pro Asp Pro Asp Leu Phe Asp Thr Lys Asn
 115 120 125
 Thr Asn Met Thr Glu Tyr Asp Leu Asp Val Leu Lys Leu Gly Lys Pro
 130 135 140
 Ala Val Asp Glu Ala Arg Lys Lys Ile Glu Val Pro Asp Ala Ser Ala
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 Pro Pro Asn Lys Ile Val Glu Tyr Leu Met Tyr Tyr Arg Thr Leu Lys
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 Glu Ser Glu Leu Ile Gln Leu Asn Ala Tyr Arg Thr Lys Arg Asn Arg
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 Lys Ala Cys Glu Ser Leu Val Lys Lys Leu Lys Asp Lys Lys Asn Asp
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 Leu Gln Asn Leu Ile Asp Val Val Leu Ser Lys Gly Thr Lys Tyr Thr
 225 230 235 240
 Gly Cys Ile Thr Ile Pro Arg Thr Leu Asp Gly Arg Leu Gln Val His
 245 250 255
 Gly Arg Lys Gly Phe Pro His Val Val Tyr Gly Lys Leu Trp Arg Phe
 260 265 270
 Asn Glu Met Thr Lys Asn Glu Thr Arg His Val Asp His Cys Lys His
 275 280 285
 Ala Phe Glu Met Lys Ser Asp Met Val Cys Val Asn Pro Tyr His Tyr
 290 295 300
 Glu Ile Val Ile Gly Thr Met Ile Val Gly Gln Arg Asp His Asp Asn
 305 310 315 320
 Arg Asp Met Pro Pro Pro His Gln Arg Tyr His Thr Pro Gly Arg Gln
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 Asp Pro Val Asp Asp Met Ser Arg Phe Ile Pro Pro Ala Ser Ile Arg
 340 345 350
 Pro Pro Pro Met Asn Met His Thr Arg Pro Gln Pro Met Pro Gln Gln
 355 360 365
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 370 375 380
 Pro His Asn Pro Gly Val Ser His Pro Tyr Ser Ile Ala Pro Gln Thr
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 His Tyr Pro Leu Asn Met Asn Pro Ile Pro Gln Met Pro Gln Met Pro
 405 410 415
 Gln Met Pro Pro Pro Leu His Gln Gly Tyr Gly Met Asn Gly Pro Ser

<212> PRT
 <213> Caenorhabditis elegans

<400> 42

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Tyr	Gly	Gly	Lys	Pro	Ser	His	Gly	Leu	Glu	Asp	Ile	Pro	Asp	Val	Glu
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Glu	Tyr	Glu	Arg	Asn	Leu	Leu	Gly	Ala	Gly	Ala	Gly	Phe	Asn	Leu	Leu
	50				55					60					
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Thr	Lys	Pro	Pro	Arg	Asp	Ala	Asn	Lys	Ser	Leu	Ala	Phe	Asn	Gly	Gly
				85					90					95	
Leu	Lys	Leu	Ile	Thr	Pro	Lys	Thr	Glu	Val	Pro	Asp	Glu	His	Thr	Pro
			100					105					110		
Met	Met	Ser	Pro	Val	Asn	Thr	Thr	Thr	Lys	Ile	Leu	Gln	Arg	Ser	Gly
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Ile	Lys	Met	Glu	Ile	Pro	Pro	Tyr	Leu	Asp	Pro	Asp	Ser	Gln	Asp	Asp
	130					135					140				
Asp	Pro	Glu	Asp	Gly	Val	Asn	Tyr	Pro	Asp	Pro	Asp	Leu	Phe	Asp	Thr
145				150					155					160	
Lys	Asn	Thr	Asn	Met	Thr	Glu	Tyr	Asp	Leu	Asp	Val	Leu	Lys	Leu	Gly
				165				170						175	
Lys	Pro	Ala	Val	Asp	Glu	Ala	Arg	Lys	Lys	Ile	Glu	Val	Pro	Asp	Ala
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Ser	Ala	Pro	Pro	Asn	Lys	Ile	Val	Glu	Tyr	Leu	Met	Tyr	Tyr	Arg	Thr
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Leu	Lys	Glu	Ser	Glu	Leu	Ile	Gln	Leu	Asn	Ala	Tyr	Arg	Thr	Lys	Arg
	210					215					220				
Asn	Arg	Leu	Ser	Leu	Asn	Leu	Val	Lys	Asn	Asn	Ile	Asp	Arg	Glu	Phe
225				230					235					240	
Asp	Gln	Lys	Ala	Cys	Glu	Ser	Leu	Val	Lys	Lys	Leu	Lys	Asp	Lys	Lys
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Asn	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Val	Val	Leu	Ser	Lys	Gly	Thr	Lys
			260					265					270		
Tyr	Thr	Gly	Cys	Ile	Thr	Ile	Pro	Arg	Thr	Leu	Asp	Gly	Arg	Leu	Gln
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	290					295					300				
Arg	Phe	Asn	Glu	Met	Thr	Lys	Asn	Glu	Thr	Arg	His	Val	Asp	His	Cys
305				310					315					320	
Lys	His	Ala	Phe	Glu	Met	Lys	Ser	Asp	Met	Val	Cys	Val	Asn	Pro	Tyr
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Asp	Asn	Arg	Asp	Met	Pro	Pro	Pro	His	Gln	Arg	Tyr	His	Thr	Pro	Gly
		355					360					365			
Arg	Gln	Asp	Pro	Val	Asp	Asp	Met	Ser	Arg	Phe	Ile	Pro	Pro	Ala	Ser
	370					375					380				
Ile	Arg	Pro	Pro	Pro	Met	Asn	Met	His	Thr	Arg	Pro	Gln	Pro	Met	Pro
385					390					395				400	
Gln	Gln	Leu	Pro	Ser	Val	Gly	Ala	Thr	Phe	Ala	His	Pro	Leu	Pro	His
				405					410					415	
Gln	Ala	Pro	His	Asn	Pro	Gly	Val	Ser	His	Pro	Tyr	Ser	Ile	Ala	Pro
			420					425					430		
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Pro	Ser	Cys	Ser	Ser	Glu	Asn	Asn	Asn	Pro	Phe	His	Gln	Asn	His	His		
465					470					475					480		
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Asn	Leu	Tyr	Gly	Phe	Pro	Thr	Pro	Tyr	Pro	Asp	Phe	His	His	Pro	Phe		
			500					505					510				
Asn	Gln	Gln	Pro	His	Gln	Pro	Pro	Gln	Leu	Ser	Gln	Asn	His	Thr	Ser		
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Val	Phe	Arg	Arg	Tyr	Cys	Arg	Gln	Thr	Phe	Gly	Asn	Arg	Phe	Phe	Glu		
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			580					585					590				
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Arg	Met	Thr	Asp	Gly	Glu	Val	Leu	Glu	Asn	Ile	Met	Pro	Glu	Asp	Ala		
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Pro	Tyr	His	Asp	Ile	Cys	Lys	Phe	Ile	Leu	Arg	Leu	Thr	Ser	Glu	Ser		
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Val	Thr	Phe	Ser	Gly	Glu	Gly	Pro	Glu	Val	Ser	Asp	Leu	Asn	Glu	Lys		
				645					650					655			
Trp	Gly	Thr	Ile	Val	Tyr	Tyr	Glu	Lys	Asn	Leu	Gln	Ile	Gly	Glu	Lys		
			660					665					670				
Lys	Cys	Ser	Arg	Gly	Asn	Phe	His	Val	Asp	Gly	Gly	Phe	Ile	Cys	Ser		
	675						680					685					
Glu	Asn	Arg	Tyr	Ser	Leu	Gly	Leu	Glu	Pro	Asn	Pro	Ile	Arg	Glu	Pro		
	690					695					700						
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705					710					715					720		
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			740					745					750				
Lys	Asp	Lys	Val	His	Lys	Val	Tyr	Gly	Cys	Ala	Ser	Ile	Lys	Thr	Phe		
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Gly	Phe	Asn	Val	Ser	Lys	Gln	Ile	Ile	Arg	Asp	Ala	Leu	Leu	Ser	Lys		
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Gln	Met	Ala	Thr	Met	Tyr	Leu	Gln	Gly	Lys	Leu	Thr	Pro	Met	Asn	Tyr		
785					790					795					800		
Ile	Tyr	Glu	Lys	Lys	Thr	Gln	Glu	Glu	Leu	Arg	Arg	Glu	Ala	Thr	Arg		
				805					810					815			
Thr	Thr	Asp	Ser	Leu	Ala	Lys	Tyr	Cys	Cys	Val	Arg	Val	Ser	Phe	Cys		
			820					825					830				
Lys	Gly	Phe	Gly	Glu	Ala	Tyr	Pro	Glu	Arg	Pro	Ser	Ile	His	Asp	Cys		
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Pro	Val	Trp	Ile	Glu	Leu	Lys	Ile	Asn	Ile	Ala	Tyr	Asp	Phe	Met	Asp		
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Ser	Ile	Cys	Gln	Tyr	Ile	Thr	Asn	Cys	Phe	Glu	Pro	Leu	Gly	Met	Glu		
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<211> 2704

<212> DNA

<213> *Caenorhabditis elegans*

<400> 44

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 <211> 510
 <212> PRT
 <213> Caenorhabditis elegans

<400> 45
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 Ser His Gln Thr Ser Phe Pro Ser Asp Phe Arg Met Ser Glu Ser Pro
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 Trp Lys Asn Ser Ile Arg His Asn Leu Ser Leu His Ser Arg Phe Met
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Asp	Gln	Pro	Leu	Met	Asp	Thr	Met	Asp	Val	Asp	Ala	Leu	Ile	Arg	His
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<210> 46
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 <212> PRT
 <213> Caenorhabditis elegans

<400> 46

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 <212> DNA
 <213> *Caenorhabditis elegans*

<400> 47

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 <211> 1167
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 48

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Phe	Lys	His	Gln	Leu	Phe	Glu	Leu	Ile	Ala	Pro	Met	Lys	Trp	Gly	Thr
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Tyr	Ser	Val	Lys	Pro	Gln	Asp	Tyr	Val	Phe	Arg	Gln	Leu	Asn	Asn	Phe
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Glu	Leu	His	Gly	Thr	Phe	Pro	Met	Leu	Phe	Leu	Tyr	Gln	Pro	Asp	Gly
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Ile	Asn	Arg	Asp	Lys	Glu	Leu	Met	Ser	Asp	Ile	Ser	His	Cys	Leu	Gly
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Tyr	Ser	Leu	Asp	Lys	Leu	Glu	Glu	Ser	Leu	Asp	Glu	Glu	Leu	Arg	Gln
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Phe	Arg	Ala	Ser	Leu	Trp	Ala	Arg	Thr	Lys	Lys	Thr	Cys	Leu	Thr	Arg
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His	Arg	Leu	Phe	Trp	Leu	Leu	Arg	Ala	Glu	Ile	Ala	Arg	Leu	Arg
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Cys	Asp	Leu	Lys	Ser	Glu	Glu	Tyr	Arg	Arg	Ile	Ser	Leu	Leu	Met
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<210> 50
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<220>
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<400> 50
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<220>
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<210> 52
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 <212> DNA
 <213> *Caenorhabditis elegans*

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<210> 53

<211> 3119

<212> DNA

<213> *Caenorhabditis elegans*

<400> 53

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<210> 54

<211> 103

<212> PRT

<213> *Caenorhabditis elegans*

<400> 54

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<213> Caenorhabditis elegans

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<213> Caenorhabditis elegans

<400> 56
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Trp Lys Asn Ser Ile Arg His Asn Leu Ser Leu His Ser Arg Phe Met
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<210> 57
<211> 655
<212> PRT
<213> Homo sapiens

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Ala Val Ser Ala Asp Phe Met Ser Asn Leu Ser Leu Leu Glu Glu Ser
65 70 75 80
Glu Asp Phe Pro Gln Ala Pro Gly Ser Val Ala Ala Ala Val Ala Ala
85 90 95

Ala	Ala	Ala	Ala	Ala	Ala	Thr	Gly	Gly	Leu	Cys	Gly	Asp	Phe	Gln	Gly
			100					105					110		
Pro	Glu	Ala	Gly	Cys	Leu	His	Pro	Ala	Pro	Pro	Gln	Pro	Pro	Pro	Pro
		115					120					125			
Gly	Pro	Val	Ser	Gln	His	Pro	Pro	Val	Pro	Pro	Ala	Ala	Ala	Gly	Pro
	130					135					140				
Leu	Ala	Gly	Gln	Pro	Arg	Lys	Ser	Ser	Ser	Ser	Arg	Arg	Asn	Ala	Trp
145					150					155					160
Gly	Asn	Leu	Ser	Tyr	Ala	Asp	Leu	Ile	Thr	Lys	Ala	Ile	Glu	Ser	Ser
				165					170					175	
Ala	Glu	Lys	Arg	Leu	Thr	Leu	Ser	Gln	Ile	Tyr	Glu	Trp	Met	Val	Lys
			180					185					190		
Ser	Val	Pro	Tyr	Phe	Lys	Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly
		195					200					205			
Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	His	Ser	Lys	Phe	Ile
	210					215					220				
Arg	Val	Gln	Asn	Glu	Gly	Thr	Gly	Lys	Ser	Ser	Trp	Trp	Met	Leu	Asn
225					230					235					240
Pro	Glu	Gly	Gly	Lys	Ser	Gly	Lys	Ser	Pro	Arg	Arg	Arg	Ala	Ala	Ser
				245					250					255	
Met	Asp	Asn	Asn	Ser	Lys	Phe	Ala	Lys	Ser	Arg	Ser	Arg	Ala	Ala	Lys
			260					265					270		
Lys	Lys	Ala	Ser	Leu	Gln	Ser	Gly	Gln	Glu	Gly	Ala	Gly	Asp	Ser	Pro
		275					280					285			
Gly	Ser	Gln	Phe	Ser	Lys	Trp	Pro	Ala	Ser	Pro	Gly	Ser	His	Ser	Asn
	290					295					300				
Asp	Asp	Phe	Asp	Asn	Trp	Ser	Thr	Phe	Arg	Pro	Arg	Thr	Ser	Ser	Asn
305					310					315					320
Ala	Ser	Thr	Ile	Ser	Gly	Arg	Leu	Ser	Pro	Ile	Met	Thr	Glu	Gln	Asp
				325					330					335	
Asp	Leu	Gly	Glu	Gly	Asp	Val	His	Ser	Met	Val	Tyr	Pro	Pro	Ser	Ala
			340					345					350		
Ala	Lys	Met	Ala	Ser	Thr	Leu	Pro	Ser	Leu	Ser	Glu	Ile	Ser	Asn	Pro
		355					360					365			
Glu	Asn	Met	Glu	Asn	Leu	Leu	Asp	Asn	Leu	Asn	Leu	Leu	Ser	Ser	Pro
	370					375					380				
Thr	Ser	Leu	Thr	Val	Ser	Thr	Gln	Ser	Ser	Pro	Gly	Thr	Met	Met	Gln
385					390					395					400
Gln	Thr	Pro	Cys	Tyr	Ser	Phe	Ala	Pro	Pro	Asn	Thr	Ser	Leu	Asn	Ser
				405					410					415	
Pro	Ser	Pro	Asn	Tyr	Gln	Lys	Tyr	Thr	Tyr	Gly	Gln	Ser	Ser	Met	Ser
			420					425					430		
Pro	Leu	Pro	Gln	Met	Pro	Ile	Gln	Thr	Leu	Gln	Asp	Asn	Lys	Ser	Ser
		435					440					445			
Tyr	Gly	Gly	Met	Ser	Gln	Tyr	Asn	Cys	Ala	Pro	Gly	Leu	Leu	Lys	Glu
	450					455					460				
Leu	Leu	Thr	Ser	Asp	Ser	Pro	Pro	His	Asn	Asp	Ile	Met	Thr	Pro	Val
465					470					475					480
Asp	Pro	Gly	Val	Ala	Gln	Pro	Asn	Ser	Arg	Val	Leu	Gly	Gln	Asn	Val
				485					490					495	
Met	Met	Gly	Pro	Asn	Ser	Val	Met	Ser	Thr	Tyr	Gly	Ser	Gln	Ala	Ser
			500					505					510		
His	Asn	Lys	Met	Met	Asn	Pro	Ser	Ser	His	Thr	His	Pro	Gly	His	Ala
		515					520					525			
Gln	Gln	Thr	Ser	Ala	Val	Asn	Gly	Arg	Pro	Leu	Pro	His	Thr	Val	Ser
		530				535					540				
Thr	Met	Pro	His	Thr	Ser	Gly	Met	Asn	Arg	Leu	Thr	Gln	Val	Lys	Thr
545					550					555					560
Pro	Val	Gln	Val	Pro	Leu	Pro	His	Pro	Met	Gln	Met	Ser	Ala	Leu	Gly

				565					570					575			
Gly	Tyr	Ser	Ser	Val	Ser	Ser	Cys	Asn	Gly	Tyr	Gly	Arg	Met	Gly	Leu		
			580					585					590				
Leu	His	Gln	Glu	Lys	Leu	Pro	Ser	Asp	Leu	Asp	Gly	Met	Phe	Ile	Glu		
		595					600					605					
Arg	Leu	Asp	Cys	Asp	Met	Glu	Ser	Ile	Ile	Arg	Asn	Asp	Leu	Met	Asp		
	610					615					620						
Gly	Asp	Thr	Leu	Asp	Phe	Asn	Phe	Asp	Asn	Val	Leu	Pro	Asn	Gln	Ser		
625					630					635					640		
Phe	Pro	His	Ser	Val	Lys	Thr	Thr	Thr	His	Ser	Trp	Val	Ser	Gly			
				645					650					655			

<210> 58
 <211> 98
 <212> PRT
 <213> Caenorhabditis elegans

<400> 58

Lys	Pro	Asn	Pro	Trp	Gly	Glu	Glu	Ser	Tyr	Ser	Asp	Ile	Ile	Ala	Lys		
1			5					10						15			
Ala	Leu	Glu	Ser	Ala	Pro	Asp	Gly	Arg	Leu	Lys	Leu	Asn	Glu	Ile	Tyr		
		20					25					30					
Gln	Trp	Phe	Ser	Asp	Asn	Ile	Pro	Tyr	Phe	Gly	Glu	Arg	Ser	Ser	Pro		
	35					40					45						
Glu	Glu	Ala	Ala	Gly	Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu		
	50					55					60						
His	Ser	Arg	Phe	Met	Arg	Ile	Gln	Asn	Glu	Gly	Ala	Gly	Lys	Ser	Ser		
65					70					75				80			
Trp	Trp	Val	Ile	Asn	Pro	Asp	Ala	Lys	Pro	Gly	Met	Asn	Pro	Arg	Arg		
				85					90					95			

Thr Arg

<210> 59
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 59
 Trp Lys Asn Ser Ile Arg His
 1 5

<210> 60
 <211> 121
 <212> PRT
 <213> Caenorhabditis elegans

<400> 60

Gln	Val	Leu	Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly		
1				5				10						15			
Val	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr		
		20					25					30					
Ser	Lys	Asp	His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu		
	35					40					45						
Arg	Phe	Pro	Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly		
	50					55					60						

Leu	Leu	Val	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp
65					70					75					80
Ala	Leu	Glu	Ile	Cys	Arg	Ala	Asp	Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu
				85					90					95	
Ala	Thr	Tyr	Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln
			100					105					110		
Ser	Glu	Thr	Asp	Thr	Ser	Tyr	Phe	Asp							
		115					120								

<210> 61
 <211> 66
 <212> PRT
 <213> *Caenorhabditis elegans*

Thr	Met	Glu	Asp	Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Lys	Gly	Thr	Phe
1				5					10					15	
Gly	Lys	Val	Ile	Leu	Cys	Lys	Glu	Lys	Arg	Thr	Gln	Lys	Leu	Tyr	Ala
			20					25					30		
Ile	Lys	Ile	Leu	Lys	Lys	Asp	Val	Ile	Ile	Ala	Arg	Glu	Glu	Val	Ala
		35					40					45			
His	Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Gln	Arg	Cys	Lys	His	Pro	Phe
	50					55					60				
Leu	Thr														
65															

<210> 62
 <211> 45
 <212> PRT
 <213> *Caenorhabditis elegans*

Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Ala
1				5					10					15	
Asp	Phe	Gly	Leu	Cys	Lys	Glu	Glu	Ile	Ser	Phe	Gly	Asp	Lys	Thr	Ser
			20					25					30		
Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val			
		35					40					45			

<210> 63
 <211> 57
 <212> PRT
 <213> *Caenorhabditis elegans*

Tyr	Phe	Gln	Glu	Leu	Lys	Tyr	Ser	Phe	Gln	Glu	Gln	His	Tyr	Leu	Cys
1				5					10					15	
Phe	Val	Met	Gln	Phe	Ala	Asn	Gly	Gly	Glu	Leu	Phe	Thr	His	Val	Arg
			20					25					30		
Lys	Cys	Gly	Thr	Phe	Ser	Glu	Pro	Arg	Ala	Arg	Phe	Tyr	Gly	Ala	Glu
		35					40					45			
Ile	Val	Leu	Ala	Leu	Gly	Tyr	Leu	His							
	50					55									

<210> 64

<211> 59
 <212> PRT
 <213> Caenorhabditis elegans

<400> 64
 Ser Thr Phe Ala Ile Phe Tyr Phe Gln Thr Met Leu Phe Glu Lys Pro
 1 5 10 15
 Arg Pro Asn Met Phe Met Val Arg Cys Leu Gln Trp Thr Thr Val Ile
 20 25 30
 Glu Arg Thr Phe Tyr Ala Glu Ser Ala Glu Val Arg Gln Arg Trp Ile
 35 40 45
 His Ala Ile Glu Ser Ile Ser Lys Lys Tyr Lys
 50 55

<210> 65
 <211> 33
 <212> PRT
 <213> Caenorhabditis elegans

<400> 65
 Leu Gln Glu Leu Lys Tyr Ser Phe Gln Thr Asn Asp Arg Leu Cys Phe
 1 5 10 15
 Val Met Glu Phe Ala Ile Gly Gly Asp Leu Tyr Tyr His Leu Asn Arg
 20 25 30
 Glu

<210> 66
 <211> 21
 <212> PRT
 <213> Caenorhabditis elegans

<400> 66
 Val Val Ile Glu Gly Trp Leu His Lys Lys Gly Glu His Ile Arg Asn
 1 5 10 15
 Trp Arg Pro Arg Phe
 20

<210> 67
 <211> 26
 <212> PRT
 <213> Caenorhabditis elegans

<400> 67
 Phe Ser Glu Pro Arg Ala Arg Phe Tyr Gly Ser Glu Ile Val Leu Ala
 1 5 10 15
 Leu Gly Tyr Leu His Ala Asn Ser Ile Val
 20 25

<210> 68
 <211> 39
 <212> PRT
 <213> Caenorhabditis elegans

<400> 68

50		55		60
Asn Ser Val Ser Arg Arg Phe Cys Gln Lys Cys Arg Leu Arg Lys Cys				
65		70		75
Phe Thr Val Gly Met Lys Lys Glu Trp Ile Leu Asn Glu Glu Gln Leu				80
	85		90	95
Arg Arg Arg Lys Asn Ser Arg Leu Asn				
	100		105	

<210> 73
 <211> 89
 <212> PRT
 <213> Caenorhabditis elegans

<400> 73

Leu Asp Ser Ser Glu Glu Ser Arg Arg Arg Gln Lys Thr Cys Arg Val	
1	5
Cys Gly Asp His Ala Thr Gly Tyr Asn Phe Asn Val Ile Thr Cys Glu	
	20
Ser Cys Lys Ala Phe Phe Arg Arg Asn Ala Leu Arg Pro Lys Glu Phe	
	35
Lys Cys Pro Tyr Ser Glu Asp Cys Glu Ile Asn Ser Val Ser Arg Arg	
	50
Phe Cys Gln Lys Cys Arg Leu Arg Lys Cys Phe Thr Val Gly Met Lys	
65	70
Lys Glu Trp Ile Leu Asn Glu Glu Gln	
	85

<210> 74
 <211> 73
 <212> PRT
 <213> Caenorhabditis elegans

<400> 74

Asp Ile Met Asn Ile Met Asp Val Thr Met Arg Arg Phe Val Lys Val	
1	5
Ala Lys Gly Val Pro Ala Phe Arg Glu Val Ser Gln Glu Gly Lys Phe	
	20
Ser Leu Leu Lys Gly Gly Met Ile Glu Met Leu Thr Val Arg Gly Val	
	35
Thr Arg Tyr Asp Ala Ser Thr Asn Ser Phe Lys Thr Pro Thr Ile Lys	
	50
Gly Gln Asn Val Ser Val Asn Val Asp	
65	70

<210> 75
 <211> 112
 <212> PRT
 <213> Caenorhabditis elegans

<400> 75

Ser Gly Ser Leu Val Asp Leu Met Ile Lys Asn Leu Thr Ala Tyr Thr	
1	5
Gln Gly Leu Asn Glu Thr Val Lys Asn Arg Thr Ala Glu Leu Glu Lys	
	20
Glu Gln Glu Lys Gly Asp Gln Leu Leu Met Glu Leu Leu Pro Lys Ser	
	35
	40
	45

Val	Ala	Asn	Asp	Leu	Lys	Asn	Gly	Ile	Ala	Val	Asp	Pro	Lys	Val	Tyr
50						55					60				
Glu	Asn	Ala	Thr	Ile	Leu	Tyr	Ser	Asp	Ile	Val	Gly	Phe	Thr	Ser	Leu
65					70					75					80
Cys	Ser	Gln	Ser	Gln	Pro	Met	Glu	Val	Val	Thr	Leu	Leu	Ser	Gly	Met
				85					90					95	
Tyr	Gln	Arg	Phe	Asp	Leu	Ile	Ile	Ser	Gln	Gln	Gly	Gly	Tyr	Lys	Val
			100					105					110		

<210> 76
 <211> 107
 <212> PRT
 <213> *Caenorhabditis elegans*

Met	Glu	Thr	Ile	Gly	Asp	Ala	Tyr	Cys	Val	Ala	Ala	Gly	Leu	Pro	Val
1				5					10					15	
Val	Met	Glu	Lys	Asp	His	Val	Lys	Ser	Ile	Cys	Met	Ile	Ala	Leu	Leu
			20					25					30		
Gln	Arg	Asp	Cys	Leu	His	His	Phe	Glu	Ile	Pro	His	Arg	Pro	Gly	Thr
		35					40					45			
Phe	Leu	Asn	Cys	Arg	Trp	Gly	Phe	Asn	Ser	Gly	Pro	Val	Phe	Ala	Gly
	50					55					60				
Val	Ile	Gly	Gln	Lys	Ala	Pro	Arg	Tyr	Ala	Cys	Phe	Gly	Glu	Ala	Val
65				70					75						80
Ile	Leu	Ala	Ser	Lys	Met	Glu	Ser	Ser	Gly	Val	Glu	Asp	Arg	Ile	Gln
				85					90					95	
Met	Thr	Leu	Ala	Ser	Gln	Gln	Leu	Leu	Glu	Glu					
			100					105							

<210> 77
 <211> 43
 <212> PRT
 <213> *Caenorhabditis elegans*

Asp	Ile	Leu	Lys	Gly	Leu	Glu	Tyr	Ile	His	Ala	Ser	Ala	Ile	Asp	Phe
1				5					10					15	
His	Gly	Asn	Leu	Thr	Leu	His	Asn	Cys	Met	Leu	Asp	Ser	His	Trp	Ile
			20					25					30		
Val	Lys	Leu	Ser	Gly	Phe	Gly	Val	Asn	Arg	Leu					
		35					40								

<210> 78
 <211> 15
 <212> PRT
 <213> *Caenorhabditis elegans*

Asp	Met	Tyr	Ser	Phe	Gly	Val	Ile	Leu	His	Glu	Ile	Ile	Leu	Lys
1				5					10					15

<210> 79
 <211> 67
 <212> PRT

<213> *Caenorhabditis elegans*

<400> 79

```
Ala Ile Lys Ile Asn Val Asp Asp Pro Ala Ser Thr Glu Asn Leu Asn
 1           5           10           15
Tyr Leu Met Glu Ala Asn Ile Met Lys Asn Phe Lys Thr Asn Phe Ile
      20           25           30
Val Gln Leu Tyr Gly Val Ile Ser Thr Val Gln Pro Ala Met Val Val
      35           40           45
Met Glu Met Met Asp Leu Gly Asn Leu Arg Asp Tyr Leu Arg Ser Lys
 50           55           60
Arg Glu Asp
65
```

<210> 80

<211> 54

<212> PRT

<213> *Caenorhabditis elegans*

<400> 80

```
Val Ile Lys Lys Pro Glu Cys Cys Glu Asn Tyr Trp Tyr Lys Val Met
 1           5           10           15
Lys Met Cys Trp Arg Tyr Ser Pro Arg Asp Arg Pro Thr Phe Leu Gln
      20           25           30
Leu Val His Leu Leu Ala Ala Glu Ala Ser Pro Glu Phe Arg Asp Leu
      35           40           45
Ser Phe Val Leu Thr Asp
 50
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<210> 81

<211> 69

<212> PRT

<213> *Caenorhabditis elegans*

<400> 81

```
Lys Gln Asp Ser Gly Met Ala Ser Glu Leu Lys Asp Ile Phe Ala Asn
 1           5           10           15
Ile His Thr Ile Thr Gly Tyr Leu Leu Val Arg Gln Ser Ser Pro Phe
      20           25           30
Ile Ser Leu Asn Met Phe Arg Asn Leu Arg Arg Ile Glu Ala Lys Ser
      35           40           45
Leu Phe Arg Asn Leu Tyr Ala Ile Thr Val Phe Glu Asn Pro Asn Leu
 50           55           60
Lys Lys Leu Phe Asp
65
```

<210> 82

<211> 52

<212> PRT

<213> *Caenorhabditis elegans*

<400> 82

```
Phe Pro His Leu Arg Glu Ile Thr Gly Thr Leu Leu Val Phe Glu Thr
 1           5           10           15
Glu Gly Leu Val Asp Leu Arg Lys Ile Phe Pro Asn Leu Arg Val Ile
      20           25           30
```

Gly Gly Arg Ser Leu Ile Gln His Tyr Ala Leu Ile Ile Tyr Arg Asn
 35 40 45
 Pro Asp Leu Glu
 50

<210> 83
 <211> 46
 <212> PRT
 <213> Caenorhabditis elegans

<400> 83
 Glu Ile Gly Leu Asp Lys Leu Ser Val Ile Arg Asn Gly Gly Val Arg
 1 5 10 15
 Ile Ile Asp Asn Arg Lys Leu Cys Tyr Thr Lys Thr Ile Asp Trp Lys
 20 25 30
 His Leu Ile Thr Ser Ser Ile Asn Asp Val Val Val Asp Asn
 35 40 45

<210> 84
 <211> 36
 <212> PRT
 <213> Caenorhabditis elegans

<400> 84
 Tyr Asn Ala Asp Asp Trp Glu Leu Arg Gln Asp Asp Val Val Leu Gly
 1 5 10 15
 Gln Gln Cys Gly Glu Gly Ser Phe Gly Lys Val Tyr Leu Gly Thr Gly
 20 25 30
 Asn Asn Val Val
 35

<210> 85
 <211> 24
 <212> PRT
 <213> Caenorhabditis elegans

<400> 85
 Asp Ser Leu Ala Lys Tyr Cys Cys Val Arg Val Ser Phe Cys Lys Gly
 1 5 10 15
 Phe Gly Glu Ala Tyr Pro Glu Arg
 20

<210> 86
 <211> 13
 <212> PRT
 <213> Caenorhabditis elegans

<400> 86
 Gly Trp Asp Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala
 1 5 10

<210> 87
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 87

Glu	Val	Leu	Glu	Asp	Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	
1				5					10					15		
Leu	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	
			20					25					30			
Asn	Gln	Asp	His	Glu	Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Glu	Ile	
		35					40					45				
Arg	Phe	Pro	Arg	Thr	Leu	Gly	Pro	Glu	Ala	Lys	Ser	Leu	Leu	Ser	Gly	
	50					55					60					
Leu	Leu	Lys	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Ser	Glu	Asp	
65					70					75					80	
Ala	Lys	Glu	Ile	Met	Gln	His	Arg	Phe	Phe	Ala	Asn	Ile	Val	Trp	Gln	
			85					90						95		
Asp	Val	Tyr	Glu	Lys	Lys	Leu	Ser	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr	
			100					105					110			
Ser	Glu	Thr	Asp	Thr	Arg	Tyr	Phe	Asp								
			115					120								

<210> 88

<211> 121

<212> PRT

<213> Caenorhabditis elegans

<400> 88

Gln	Val	Leu	Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly	
1				5					10					15		
Val	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	
			20					25					30			
Ser	Lys	Asp	His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu	
		35					40					45				
Arg	Phe	Pro	Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly	
	50					55					60					
Leu	Leu	Val	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp	
65					70					75					80	
Ala	Leu	Glu	Ile	Cys	Arg	Ala	Asp	Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu	
			85					90						95		
Ala	Thr	Tyr	Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln	
			100					105					110			
Ser	Glu	Thr	Asp	Thr	Ser	Tyr	Phe	Asp								
			115					120								

<210> 89

<211> 66

<212> PRT

<213> Homo sapiens

<400> 89

Thr	Met	Asn	Glu	Phe	Glu	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr	Phe	
1				5					10					15		
Gly	Lys	Val	Ile	Leu	Val	Lys	Glu	Lys	Ala	Thr	Gly	Arg	Tyr	Tyr	Ala	
			20					25					30			
Met	Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Val	Ala	Lys	Asp	Glu	Val	Ala	
		35				40						45				
His	Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Gln	Asn	Ser	Arg	His	Pro	Phe	
	50					55					60					

Leu Thr
65

<210> 90
<211> 66
<212> PRT
<213> *Caenorhabditis elegans*

<400> 90
Thr Met Glu Asp Phe Asp Phe Leu Lys Val Leu Gly Lys Gly Thr Phe
1 5 10 15
Gly Lys Val Ile Leu Cys Lys Glu Lys Arg Thr Gln Lys Leu Tyr Ala
20 25 30
Ile Lys Ile Leu Lys Lys Asp Val Ile Ala Arg Glu Glu Val Ala
35 40 45
His Thr Leu Thr Glu Asn Arg Val Leu Gln Arg Cys Lys His Pro Phe
50 55 60
Leu Thr
65

<210> 91
<211> 45
<212> PRT
<213> *Homo sapiens*

<400> 91
Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile Lys Ile Thr
1 5 10 15
Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala Thr Met Lys
20 25 30
Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val
35 40 45

<210> 92
<211> 45
<212> PRT
<213> *Caenorhabditis elegans*

<400> 92
Lys Leu Glu Asn Leu Leu Leu Asp Lys Asp Gly His Ile Lys Ile Ala
1 5 10 15
Asp Phe Gly Leu Cys Lys Glu Glu Ile Ser Phe Gly Asp Lys Thr Ser
20 25 30
Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val
35 40 45

<210> 93
<211> 57
<212> PRT
<213> *Homo sapiens*

<400> 93
Phe Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His Asp Arg Leu Cys
1 5 10 15
Phe Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe Phe His Leu Ser

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<210> 94
<211> 57
<212> PRT
<213> Caenorhabditis elegans
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<210> 95
<211> 59
<212> PRT
<213> Homo sapiens
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```
<210> 96
<211> 59
<212> PRT
<213> Caenorhabditis elegans
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```
<210> 97
<211> 33
<212> PRT
<213> Homo sapiens
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<400> 97
 Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His Asp Arg Leu Cys Phe
 1 5 10 15
 Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe Phe His Leu Ser Arg
 20 25 30
 Glu

<210> 98
 <211> 33
 <212> PRT
 <213> Caenorhabditis elegans

<400> 98
 Leu Gln Glu Leu Lys Tyr Ser Phe Gln Thr Asn Asp Arg Leu Cys Phe
 1 5 10 15
 Val Met Glu Phe Ala Ile Gly Gly Asp Leu Tyr Tyr His Leu Asn Arg
 20 25 30
 Glu

<210> 99
 <211> 36
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 99
 Lys Leu Glu Asn Leu Leu Asp Lys Asp Gly His Ile Lys Ile Asp Phe
 1 5 10 15
 Gly Leu Cys Lys Glu Ile Gly Thr Phe Cys Gly Thr Pro Glu Tyr Leu
 20 25 30
 Ala Pro Glu Val
 35

<210> 100
 <211> 37
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 100
 Leu Lys Tyr Ser Phe Gln Leu Cys Phe Val Met Ala Asn Gly Gly Glu
 1 5 10 15
 Leu Phe His Phe Ser Glu Arg Ala Arg Phe Tyr Gly Ala Glu Ile Val
 20 25 30
 Ala Leu Tyr Leu His
 35

<210> 101
 <211> 29
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 101
 Phe Gln Met Glu Pro Arg Pro Asn Phe Arg Cys Leu Gln Trp Thr Thr
 1 5 10 15

Val Ile Glu Arg Thr Phe Glu Glu Arg Trp Ala Ile Lys
 20 25

<210> 102
 <211> 24
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 102
 Leu Leu Lys Tyr Ser Phe Gln Thr Asp Arg Leu Cys Phe Val Met Glu
 1 5 10 15
 Ala Gly Gly Leu His Leu Arg Glu
 20

<210> 103
 <211> 366
 <212> PRT
 <213> Homo sapiens

<400> 103
 Arg Gly Ala Ile Arg Ile Glu Lys Asn Ala Asp Leu Cys Tyr Leu Ser
 1 5 10 15
 Thr Val Asp Trp Ser Leu Ile Leu Asp Ala Val Ser Asn Asn Tyr Ile
 20 25 30
 Val Gly Asn Lys Pro Pro Lys Glu Cys Gly Asp Leu Cys Pro Gly Thr
 35 40 45
 Met Glu Glu Lys Pro Met Cys Glu Lys Thr Thr Ile Asn Asn Glu Tyr
 50 55 60
 Asn Tyr Arg Cys Trp Thr Thr Asn Arg Cys Gln Lys Met Cys Pro Ser
 65 70 75 80
 Thr Cys Gly Lys Arg Ala Cys Thr Glu Asn Asn Glu Cys Cys His Pro
 85 90 95
 Glu Cys Leu Gly Ser Cys Ser Ala Pro Asp Asn Asp Thr Ala Cys Val
 100 105 110
 Ala Cys Arg His Tyr Tyr Tyr Ala Gly Val Cys Val Pro Ala Cys Pro
 115 120 125
 Pro Asn Thr Tyr Arg Phe Glu Gly Trp Arg Cys Val Asp Arg Asp Phe
 130 135 140
 Cys Ala Asn Ile Leu Ser Ala Glu Ser Ser Asp Ser Glu Gly Phe Val
 145 150 155 160
 Ile His Asp Gly Glu Cys Met Gln Glu Cys Pro Ser Gly Phe Ile Arg
 165 170 175
 Asn Gly Ser Gln Ser Met Tyr Cys Ile Pro Cys Glu Gly Pro Cys Pro
 180 185 190
 Lys Val Cys Glu Glu Glu Lys Lys Thr Lys Thr Ile Asp Ser Val Thr
 195 200 205
 Ser Ala Gln Met Leu Gln Gly Cys Thr Ile Phe Lys Gly Asn Leu Leu
 210 215 220
 Ile Asn Ile Arg Arg Gly Asn Asn Ile Ala Ser Glu Leu Glu Asn Phe
 225 230 235 240
 Met Gly Leu Ile Glu Val Val Thr Gly Tyr Val Lys Ile Arg His Ser
 245 250 255
 His Ala Leu Val Ser Leu Ser Phe Leu Lys Asn Leu Arg Leu Ile Leu
 260 265 270
 Gly Glu Glu Gln Leu Glu Gly Asn Tyr Ser Phe Tyr Val Leu Asp Asn
 275 280 285
 Gln Asn Leu Gln Gln Leu Trp Asp Trp Asp His Arg Asn Leu Thr Ile

290		295		300
Lys Ala Gly Lys Met Tyr Phe Ala Phe Asn Pro Lys Leu Cys Val Ser				
305		310		315
Glu Ile Tyr Arg Met Glu Glu Val Thr Gly Thr Lys Gly Arg Gln Ser				
	325		330	335
Lys Gly Asp Ile Asn Thr Arg Asn Asn Gly Glu Arg Ala Ser Cys Glu				
	340		345	350
Ser Asp Val Leu His Phe Thr Ser Thr Thr Thr Ser Lys Asn				
	355	360		365

<210> 104
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 104

Arg Gly Ser Val Arg Ile Glu Lys Asn Asn Glu Leu Cys Tyr Leu Ala				
1	5	10	15	
Thr Ile Asp Trp Ser Arg Ile Leu Asp Ser Val Glu Asp Asn Tyr Ile				
	20	25	30	
Val Leu Asn Lys Asp Asp Asn Glu Cys Gly Asp Ile Cys Pro Gly				
	35	40	45	
Thr Ala Lys Gly Lys Thr Asn Cys Pro Ala Thr Val Ile Asn Gly Gln				
	50	55	60	
Phe Val Glu Arg Cys Trp Thr His Ser His Cys Gln Lys Val Cys Pro				
65	70	75	80	
Thr Ile Cys Lys Ser His Gly Cys Thr Ala Glu Gly Leu Cys Cys His				
	85	90	95	
Ser Glu Cys Leu Gly Asn Cys Ser Gln Pro Asp Asp Pro Thr Lys Cys				
	100	105	110	
Val Ala Cys Arg Asn Phe Tyr Leu Asp Gly Arg Cys Val Glu Thr Cys				
	115	120	125	
Pro Pro Pro Tyr Tyr His Phe Gln Asp Trp Arg Cys Val Asn Phe Ser				
	130	135	140	
Phe Cys Gln Asp Leu His His Lys Cys Lys Asn Ser Arg Arg Gln Gly				
145	150	155	160	
Cys His Gln Tyr Val Ile His Asn Asn Lys Cys Ile Pro Glu Cys Pro				
	165	170	175	
Ser Gly Tyr Thr Met Asn Ser Ser Asn Leu Leu Cys Thr Pro Cys Leu				
	180	185	190	
Gly Pro Cys Pro Lys Val Cys His Leu Leu Glu Gly Glu Lys Thr Ile				
	195	200	205	
Asp Ser Val Thr Ser Ala Gln Glu Leu Arg Gly Cys Thr Val Ile Asn				
	210	215	220	
Gly Ser Leu Ile Ile Asn Ile Arg Gly Gly Asn Asn Leu Ala Ala Glu				
225	230	235	240	
Leu Glu Ala Asn Leu Gly Leu Ile Glu Glu Ile Ser Gly Tyr Leu Lys				
	245	250	255	
Ile Arg Arg Ser Tyr Ala Leu Val Ser Leu Ser Phe Phe Arg Lys Leu				
	260	265	270	
Arg Leu Ile Arg Gly Glu Thr Leu Glu Ile Gly Asn Tyr Ser Phe Tyr				
	275	280	285	
Ala Leu Asp Asn Gln Asn Leu Arg Gln Leu Trp Asp Trp Ser Lys His				
	290	295	300	
Asn Leu Thr Ile Thr Gln Gly Lys Leu Phe Phe His Tyr Asn Pro Lys				
305	310	315	320	
Leu Cys Leu Ser Glu Ile His Lys Met Glu Glu Val Ser Gly Thr Lys				
	325	330	335	

Gly	Arg	Gln	Glu	Arg	Asn	Asp	Ile	Ala	Leu	Lys	Thr	Asn	Gly	Asp	Gln
			340					345					350		
Ala	Ser	Cys	Glu	Asn	Glu	Leu	Leu	Lys	Phe	Ser	Tyr	Ile	Arg	Thr	Ser
		355					360					365			
Phe	Asp														
	370														

<210> 105

<211> 383

<212> PRT

<213> *Drosophila melanogaster*

<400> 105

Arg	Gly	Gly	Val	Arg	Ile	Glu	Lys	Asn	His	Lys	Leu	Cys	Tyr	Asp	Arg
1				5					10					15	
Thr	Ile	Asp	Trp	Leu	Glu	Ile	Leu	Ala	Glu	Asn	Glu	Ser	Gln	Leu	Val
			20					25					30		
Val	Leu	Thr	Glu	Asn	Gly	Lys	Glu	Lys	Glu	Cys	Ser	Leu	Ser	Lys	Cys
		35				40						45			
Pro	Gly	Glu	Ile	Arg	Ile	Glu	Gly	His	Asp	Asn	Thr	Ala	Ile	Glu	
	50				55					60					
Gly	Glu	Leu	Asn	Ala	Ser	Cys	Gln	Leu	His	Asn	Asn	Arg	Arg	Leu	Cys
65				70					75					80	
Trp	Asn	Ser	Lys	Leu	Cys	Gln	Thr	Lys	Cys	Pro	Glu	Lys	Cys	Arg	Asn
			85					90						95	
Asn	Cys	Ile	Asp	Glu	His	Thr	Cys	Cys	Ser	Gln	Asp	Cys	Leu	Gly	Gly
			100				105						110		
Cys	Val	Ile	Asp	Lys	Asn	Gly	Asn	Glu	Ser	Cys	Ile	Ser	Cys	Arg	Asn
		115				120						125			
Val	Ser	Phe	Asn	Asn	Ile	Cys	Met	Asp	Ser	Cys	Pro	Lys	Gly	Tyr	Tyr
	130				135						140				
Gln	Phe	Asp	Ser	Arg	Cys	Val	Thr	Ala	Asn	Glu	Cys	Ile	Thr	Leu	Thr
145				150					155					160	
Lys	Phe	Glu	Thr	Asn	Ser	Val	Tyr	Ser	Gly	Ile	Pro	Tyr	Asn	Gly	Gln
			165					170						175	
Cys	Ile	Thr	His	Cys	Pro	Thr	Gly	Tyr	Gln	Lys	Ser	Glu	Asn	Lys	Arg
		180					185						190		
Met	Cys	Glu	Pro	Cys	Pro	Gly	Gly	Lys	Cys	Asp	Lys	Glu	Cys	Ser	Ser
		195				200						205			
Gly	Leu	Ile	Asp	Ser	Leu	Glu	Arg	Ala	Arg	Glu	Phe	His	Gly	Cys	Thr
	210				215					220					
Ile	Ile	Thr	Gly	Thr	Glu	Pro	Leu	Thr	Ile	Ser	Ile	Lys	Arg	Glu	Ser
225				230					235					240	
Gly	Ala	His	Val	Met	Asp	Glu	Leu	Lys	Tyr	Gly	Leu	Ala	Ala	Val	His
			245					250						255	
Lys	Ile	Gln	Ser	Ser	Leu	Met	Val	His	Leu	Thr	Tyr	Gly	Leu	Lys	Ser
		260					265						270		
Leu	Lys	Phe	Phe	Gln	Ser	Leu	Thr	Glu	Ile	Ser	Gly	Asp	Pro	Pro	Met
		275				280						285			
Asp	Ala	Asp	Lys	Tyr	Ala	Leu	Tyr	Val	Leu	Asp	Asn	Arg	Asp	Leu	Asp
	290				295						300				
Glu	Leu	Trp	Gly	Pro	Asn	Gln	Thr	Val	Phe	Ile	Arg	Lys	Gly	Gly	Val
305				310					315					320	
Phe	Phe	His	Phe	Asn	Pro	Lys	Leu	Cys	Val	Ser	Thr	Ile	Asn	Gln	Leu
			325					330						335	
Leu	Pro	Met	Leu	Ala	Ser	Lys	Pro	Lys	Phe	Phe	Glu	Lys	Ser	Asp	Glu
		340					345						350		
Gly	Ala	Asp	Ser	Asn	Gly	Asn	Arg	Gly	Ser	Cys	Gly	Thr	Ala	Val	Leu

		355					360					365			
Asn	Val	Thr	Leu	Gln	Ser	Val	Gly	Ala	Asn	Ser	Ala	Ser	Leu	Asn	
	370						375					380			

<210> 106
 <211> 381
 <212> PRT
 <213> Caenorhabditis elegans

<400> 106

Asn	Gly	Gly	Val	Arg	Ile	Ile	Asp	Asn	Arg	Lys	Leu	Cys	Tyr	Thr	Lys
1				5					10					15	
Thr	Ile	Asp	Trp	Lys	His	Leu	Ile	Thr	Ser	Ser	Ile	Asn	Asp	Val	Val
		20						25					30		
Val	Asp	Asn	Ala	Ala	Glu	Tyr	Ala	Val	Thr	Glu	Thr	Gly	Leu	Met	Cys
		35					40					45			
Pro	Arg	Gly	Ala	Cys	Glu	Glu	Asp	Lys	Gly	Glu	Ser	Lys	Cys	His	Tyr
	50					55					60				
Leu	Glu	Glu	Lys	Asn	Gln	Glu	Gln	Gly	Val	Glu	Arg	Val	Gln	Ser	Cys
65					70					75					80
Trp	Ser	Asn	Thr	Thr	Cys	Gln	Lys	Ser	Cys	Ala	Tyr	Asp	Arg	Leu	Leu
				85					90					95	
Pro	Thr	Lys	Glu	Ile	Gly	Pro	Gly	Cys	Asp	Ala	Asn	Gly	Asp	Arg	Cys
			100					105					110		
His	Asp	Gln	Cys	Val	Gly	Gly	Cys	Glu	Arg	Val	Asn	Asp	Ala	Thr	Ala
		115					120					125			
Cys	His	Ala	Cys	Lys	Asn	Val	Tyr	His	Lys	Gly	Lys	Cys	Ile	Glu	Lys
	130					135					140				
Cys	Asp	Ala	His	Leu	Tyr	Leu	Leu	Leu	Gln	Arg	Arg	Cys	Val	Thr	Arg
145					150					155					160
Glu	Gln	Cys	Leu	Gln	Leu	Asn	Pro	Val	Leu	Ser	Asn	Lys	Thr	Val	Pro
				165					170					175	
Ile	Lys	Ala	Thr	Ala	Gly	Leu	Cys	Ser	Asp	Lys	Cys	Pro	Asp	Gly	Tyr
			180					185					190		
Gln	Ile	Asn	Pro	Asp	Asp	His	Arg	Glu	Cys	Arg	Lys	Cys	Val	Gly	Lys
		195					200					205			
Cys	Glu	Ile	Val	Cys	Glu	Ile	Asn	His	Val	Ile	Asp	Thr	Phe	Pro	Lys
	210					215					220				
Ala	Gln	Ala	Ile	Arg	Leu	Cys	Asn	Ile	Ile	Asp	Gly	Asn	Leu	Thr	Ile
225					230					235					240
Glu	Ile	Arg	Gly	Lys	Gln	Asp	Ser	Gly	Met	Ala	Ser	Glu	Leu	Lys	Asp
				245					250					255	
Ile	Phe	Ala	Asn	Ile	His	Thr	Ile	Thr	Gly	Tyr	Leu	Leu	Val	Arg	Gln
			260					265					270		
Ser	Ser	Pro	Phe	Ile	Ser	Leu	Asn	Met	Phe	Arg	Asn	Leu	Arg	Arg	Ile
		275					280					285			
Glu	Ala	Lys	Ser	Leu	Phe	Arg	Asn	Leu	Tyr	Ala	Ile	Thr	Val	Phe	Glu
	290					295					300				
Asn	Pro	Asn	Leu	Lys	Lys	Leu	Phe	Asp	Ser	Thr	Thr	Asp	Leu	Thr	Leu
305					310					315					320
Asp	Arg	Gly	Thr	Val	Ser	Ile	Ala	Asn	Asn	Lys	Met	Leu	Cys	Phe	Lys
				325					330					335	
Tyr	Ile	Lys	Gln	Leu	Met	Ser	Lys	Leu	Asn	Ile	Pro	Leu	Asp	Pro	Ile
			340					345					350		
Asp	Gln	Ser	Glu	Gly	Thr	Asn	Gly	Glu	Lys	Ala	Ile	Cys	Glu	Asp	Met
		355					360					365			
Ala	Ile	Asn	Val	Ser	Ile	Thr	Ala	Val	Asn	Ala	Asp	Ser			
	370						375					380			

<210> 107
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 107
 Ala Leu Pro Val Ala Val Leu Leu Ile Val Gly Gly Leu Val Ile Met
 1 5 10 15
 Leu Tyr Val Phe His Arg Lys Arg Asn Asn Ser Arg Leu Gly Asn Gly
 20 25 30
 Val Leu Tyr Ala Ser Val Asn Pro Glu Tyr Phe Ser Ala Ala Asp Val
 35 40 45
 Tyr Val Pro Asp Glu Trp Glu Val Ala Arg Glu Lys Ile Thr Met Ser
 50 55 60
 Arg Glu Leu Gly Gln Gly Ser Phe Gly Met Val Tyr Glu Gly Val Ala
 65 70 75 80
 Lys Gly Val Val Lys Asp Glu Pro Glu Thr Arg Val Ala Ile Lys Thr
 85 90 95
 Val Asn Glu Ala Ala Ser Met Arg Glu Arg Ile Glu Phe Leu Asn Glu
 100 105 110
 Ala Ser Val Met Lys Glu Phe Asn Cys His His Val Val Arg Leu Leu
 115 120 125
 Gly Val Val Ser Gln Gly Gln Pro Thr Leu Val Ile Met Glu Leu Met
 130 135 140
 Thr Arg Gly Asp Leu Lys Ser Tyr Leu Arg Ser Leu Arg Pro Glu Met
 145 150 155 160
 Glu Asn Asn Pro Val Leu Ala Pro Pro Ser Leu Ser Lys Met Ile Gln
 165 170 175
 Met Ala Gly Glu Ile Ala Asp Gly Met Ala Tyr Leu Asn Ala Asn Lys
 180 185 190
 Phe Val His Arg Asp Leu Ala Ala Arg Asn Cys Met Val Ala Glu Asp
 195 200 205
 Phe Thr Val Lys Ile Gly Asp Phe Gly Met Thr Arg Asp Ile Tyr Glu
 210 215 220
 Thr Asp Tyr Tyr Arg Lys Gly Gly Lys Gly Leu Leu Pro Val Arg Trp
 225 230 235 240
 Met Ser Pro Glu Ser Leu Lys Asp Gly Val Phe Thr Thr Tyr Ser Asp
 245 250 255
 Val Trp Ser Phe Gly Val Val Leu Trp Glu Ile Ala Thr Leu Ala Glu
 260 265 270
 Gln Pro Tyr Gln Gly Leu Ser Asn Glu Gln Val Leu Arg Phe Val Met
 275 280 285
 Glu Gly Gly Leu Leu Asp Lys Pro Asp Asn Cys Pro Asp Met Leu Phe
 290 295 300
 Glu Leu Met Arg Met Cys Trp Gln Tyr Asn Pro Lys Met Arg Pro Ser
 305 310 315 320
 Phe Leu Glu Ile Ile Ser Ser Ile Lys Glu Glu Met Glu Pro Gly Phe
 325 330 335
 Arg Glu Val Ser Phe Tyr Tyr Ser Glu Glu Asn Lys Leu Pro Glu Pro
 340 345 350
 Glu Glu Leu Asp Leu Glu Pro Glu Asn Met Glu Ser Val Pro Leu Asp
 355 360 365
 Pro Ser
 370

<210> 108
 <211> 374

<212> PRT

<213> Homo sapiens

<400> 108

Ile Gly Pro Leu Ile Phe Val Phe Leu Phe Ser Val Val Ile Gly Ser
1 5 10 15
Ile Tyr Leu Phe Leu Arg Lys Arg Gln Pro Asp Gly Pro Leu Gly Pro
20 25 30
Leu Tyr Ala Ser Ser Asn Pro Glu Tyr Leu Ser Ala Ser Asp Val Phe
35 40 45
Pro Cys Ser Val Tyr Val Pro Asp Glu Trp Glu Val Ser Arg Glu Lys
50 55 60
Ile Thr Leu Leu Arg Glu Leu Gly Gln Gly Ser Phe Gly Met Val Tyr
65 70 75 80
Glu Gly Asn Ala Arg Asp Ile Ile Lys Gly Glu Ala Glu Thr Arg Val
85 90 95
Ala Val Lys Thr Val Asn Glu Ser Ala Ser Leu Arg Glu Arg Ile Glu
100 105 110
Phe Leu Asn Glu Ala Ser Val Met Lys Gly Phe Thr Cys His His Val
115 120 125
Val Arg Leu Leu Gly Val Val Ser Lys Gly Gln Pro Thr Leu Val Val
130 135 140
Met Glu Leu Met Ala His Gly Asp Leu Lys Ser Tyr Leu Arg Ser Leu
145 150 155 160
Arg Pro Glu Ala Glu Asn Asn Pro Gly Arg Pro Pro Pro Thr Leu Gln
165 170 175
Glu Met Ile Gln Met Ala Ala Glu Ile Ala Asp Gly Met Ala Tyr Leu
180 185 190
Asn Ala Lys Lys Phe Val His Arg Asp Leu Ala Ala Arg Asn Cys Met
195 200 205
Val Ala His Asp Phe Thr Val Lys Ile Gly Asp Phe Gly Met Thr Arg
210 215 220
Asp Ile Tyr Glu Thr Asp Tyr Tyr Arg Lys Gly Gly Lys Gly Leu Leu
225 230 235 240
Pro Val Arg Trp Met Ala Pro Glu Ser Leu Lys Asp Gly Val Phe Thr
245 250 255
Thr Ser Ser Asp Met Trp Ser Phe Gly Val Val Leu Trp Glu Ile Thr
260 265 270
Ser Leu Ala Glu Gln Pro Tyr Gln Gly Leu Ser Asn Glu Gln Val Leu
275 280 285
Lys Phe Val Met Asp Gly Gly Tyr Leu Asp Gln Pro Asp Asn Cys Pro
290 295 300
Glu Arg Val Thr Asp Leu Met Arg Met Cys Trp Gln Phe Asn Pro Lys
305 310 315 320
Met Arg Pro Thr Phe Leu Glu Ile Val Asn Leu Leu Lys Asp Asp Leu
325 330 335
His Pro Ser Phe Pro Glu Val Ser Phe Phe His Ser Glu Glu Asn Lys
340 345 350
Ala Pro Glu Ser Glu Glu Leu Glu Met Glu Phe Glu Asp Met Glu Asn
355 360 365
Val Pro Leu Asp Arg Ser
370

<210> 109

<211> 384

<212> PRT

<213> Drosophila melanogaster

<400> 109

Gly Ile Gly Leu Ala Phe Leu Ile Val Ser Leu Phe Gly Tyr Val Cys
1 5 10 15
Tyr Leu His Lys Arg Lys Val Pro Ser Asn Asp Leu His Met Asn Thr
20 25 30
Glu Val Asn Pro Phe Tyr Ala Ser Met Gln Tyr Ile Pro Asp Asp Trp
35 40 45
Glu Val Leu Arg Glu Asn Ile Ile Gln Leu Ala Pro Leu Gly Gln Gly
50 55 60
Ser Phe Gly Met Val Tyr Glu Gly Ile Leu Lys Ser Phe Pro Pro Asn
65 70 75 80
Gly Val Asp Arg Glu Cys Ala Ile Lys Thr Val Asn Glu Asn Ala Thr
85 90 95
Asp Arg Glu Arg Thr Asn Phe Leu Ser Glu Ala Ser Val Met Lys Glu
100 105 110
Phe Asp Thr Tyr His Val Val Arg Leu Leu Gly Val Cys Ser Arg Gly
115 120 125
Gln Pro Ala Leu Val Val Met Glu Leu Met Lys Lys Gly Asp Leu Lys
130 135 140
Ser Tyr Leu Arg Ala His Arg Pro Glu Glu Arg Asp Glu Ala Met Met
145 150 155 160
Thr Tyr Leu Asn Arg Ile Gly Val Thr Gly Asn Val Gln Pro Pro Thr
165 170 175
Tyr Gly Arg Ile Tyr Gln Met Ala Ile Glu Ile Ala Asp Gly Met Ala
180 185 190
Tyr Leu Ala Ala Lys Lys Phe Val His Arg Asp Leu Ala Ala Arg Asn
195 200 205
Cys Met Val Ala Asp Asp Leu Thr Val Lys Ile Gly Asp Phe Gly Met
210 215 220
Thr Arg Asp Ile Tyr Glu Thr Asp Tyr Tyr Arg Lys Gly Thr Lys Gly
225 230 235 240
Leu Leu Pro Val Arg Trp Met Pro Pro Glu Ser Leu Arg Asp Gly Val
245 250 255
Tyr Ser Ser Ala Ser Asp Val Phe Ser Phe Gly Val Val Leu Trp Glu
260 265 270
Met Ala Thr Leu Ala Ala Gln Pro Tyr Gln Gly Leu Ser Asn Glu Gln
275 280 285
Val Leu Arg Tyr Val Ile Asp Gly Gly Val Met Glu Arg Pro Glu Asn
290 295 300
Cys Pro Asp Phe Leu His Lys Leu Met Gln Arg Cys Trp His His Arg
305 310 315 320
Ser Ser Ala Arg Pro Ser Phe Leu Asp Ile Ile Ala Tyr Leu Glu Pro
325 330 335
Gln Cys Pro Asn Ser Gln Phe Lys Glu Val Ser Phe Tyr His Ser Glu
340 345 350
Ala Gly Leu Gln His Arg Glu Lys Glu Arg Lys Glu Arg Asn Gln Leu
355 360 365
Asp Ala Phe Ala Ala Val Pro Leu Asp Gln Asp Leu Gln Asp Arg Glu
370 375 380

<210> 110

<211> 380

<212> PRT

<213> Caenorhabditis elegans

<400> 110

Gly Met Leu Leu Val Phe Leu Ile Leu Met Ser Ile Ala Gly Cys Ile
1 5 10 15

Ile	Tyr	Tyr	Tyr	Ile	Gln	Val	Arg	Tyr	Gly	Lys	Lys	Val	Lys	Ala	Leu	
			20					25					30			
Ser	Asp	Phe	Met	Gln	Leu	Asn	Pro	Glu	Tyr	Cys	Val	Asp	Asn	Lys	Tyr	
		35					40					45				
Asn	Ala	Asp	Asp	Trp	Glu	Leu	Arg	Gln	Asp	Asp	Val	Val	Leu	Gly	Gln	
		50				55					60					
Gln	Cys	Gly	Glu	Gly	Ser	Phe	Gly	Lys	Val	Tyr	Leu	Gly	Thr	Gly	Asn	
65					70					75					80	
Asn	Val	Val	Ser	Leu	Met	Gly	Asp	Arg	Phe	Gly	Pro	Cys	Ala	Ile	Lys	
				85					90					95		
Ile	Asn	Val	Asp	Asp	Pro	Ala	Ser	Thr	Glu	Asn	Leu	Asn	Tyr	Leu	Met	
			100					105					110			
Glu	Ala	Asn	Ile	Met	Lys	Asn	Phe	Lys	Thr	Asn	Phe	Ile	Val	Gln	Leu	
		115					120					125				
Tyr	Gly	Val	Ile	Ser	Thr	Val	Gln	Pro	Ala	Met	Val	Val	Met	Glu	Met	
	130					135					140					
Met	Asp	Leu	Gly	Asn	Leu	Arg	Asp	Tyr	Leu	Arg	Ser	Lys	Arg	Glu	Asp	
145					150					155					160	
Glu	Val	Phe	Asn	Glu	Thr	Asp	Cys	Asn	Phe	Phe	Asp	Ile	Ile	Pro	Arg	
				165					170					175		
Asp	Lys	Phe	His	Glu	Trp	Ala	Ala	Gln	Ile	Cys	Asp	Gly	Met	Ala	Tyr	
			180					185					190			
Leu	Glu	Ser	Leu	Lys	Phe	Cys	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys	
		195					200					205				
Met	Ile	Asn	Arg	Asp	Glu	Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met	Ala	
	210					215					220					
Arg	Asp	Leu	Phe	Tyr	His	Asp	Tyr	Tyr	Lys	Pro	Ser	Gly	Lys	Arg	Met	
225					230					235					240	
Met	Pro	Val	Arg	Trp	Met	Ser	Pro	Glu	Ser	Leu	Lys	Asp	Gly	Lys	Phe	
				245					250					255		
Asp	Ser	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly	Val	Val	Leu	Tyr	Glu	Met	
			260					265					270			
Val	Thr	Leu	Gly	Ala	Gln	Pro	Tyr	Ile	Gly	Leu	Ser	Asn	Asp	Glu	Val	
		275					280					285				
Leu	Asn	Tyr	Ile	Gly	Met	Ala	Arg	Lys	Val	Ile	Lys	Lys	Pro	Glu	Cys	
	290					295					300					
Cys	Glu	Asn	Tyr	Trp	Tyr	Lys	Val	Met	Lys	Met	Cys	Trp	Arg	Tyr	Ser	
305					310					315					320	
Pro	Arg	Asp	Arg	Pro	Thr	Phe	Leu	Gln	Leu	Val	His	Leu	Leu	Ala	Ala	
				325					330					335		
Glu	Ala	Ser	Pro	Glu	Phe	Arg	Asp	Leu	Ser	Phe	Val	Leu	Thr	Asp	Asn	
			340					345					350			
Gln	Met	Ile	Leu	Asp	Asp	Ser	Glu	Ala	Leu	Asp	Leu	Asp	Asp	Ile	Asp	
		355					360					365				
Asp	Thr	Asp	Met	Asn	Asp	Gln	Val	Val	Glu	Val	Ala					
	370					375					380					

<210> 111
 <211> 103
 <212> PRT
 <213> Caenorhabditis elegans

<400> 111
 Asn Ile Asp Arg Glu Phe Asp Gln Lys Ala Cys Glu Ser Leu Val Lys
 1 5 10 15
 Lys Leu Lys Asp Lys Lys Asn Asp Leu Gln Asn Leu Ile Asp Val Val
 20 25 30
 Leu Ser Lys Gly Thr Lys Tyr Thr Gly Cys Ile Thr Ile Pro Arg Thr

Ser	Leu	Ala	Lys	Tyr	Cys	Cys	Val	Arg	Val	Ser	Phe	Cys	Lys	Gly	Phe
				165					170					175	
Gly	Glu	Ala	Tyr	Pro	Glu	Arg	Pro	Ser	Ile	His	Asp	Cys	Pro	Val	Trp
			180					185					190		
Ile	Glu	Leu	Lys	Ile	Asn	Ile	Ala	Tyr	Asp	Phe	Met	Asp			
		195					200					205			

<210> 114
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 114															
Ile	Ala	Tyr	Phe	Glu	Met	Asp	Val	Gln	Val	Gly	Glu	Thr	Phe	Lys	Val
1				5					10					15	
Pro	Ser	Ser	Cys	Pro	Ile	Val	Thr	Val	Asp	Gly	Tyr	Val	Asp	Pro	Ser
			20					25					30		
Gly	Gly	Asp	Arg	Phe	Cys	Leu	Gly	Gln	Leu	Ser	Asn	Val	His	Arg	Thr
		35					40					45			
Glu	Ala	Ile	Glu	Arg	Ala	Arg	Leu	His	Ile	Gly	Lys	Gly	Val	Gln	Leu
	50					55					60				
Glu	Cys	Lys	Gly	Glu	Gly	Asp	Val	Trp	Val	Arg	Cys	Leu	Ser	Asp	His
65					70				75						80
Ala	Val	Phe	Val	Gln	Ser	Tyr	Tyr	Leu	Asp	Arg	Glu	Ala	Gly	Arg	Ala
				85				90						95	
Pro	Gly	Asp	Ala	Val	His	Lys	Ile	Tyr	Pro	Ser	Ala	Tyr	Ile	Lys	Val
			100					105					110		
Phe	Asp	Leu	Arg	Gln	Cys	His	Arg	Gln	Met	Gln	Gln	Gln	Ala	Ala	Thr
		115					120					125			
Ala	Gln	Ala	Ala	Ala	Ala	Ala	Gln	Ala	Ala	Ala	Val	Ala	Gly	Asn	Ile
	130					135					140				
Pro	Gly	Pro	Gly	Ser	Val	Gly	Gly	Ile	Ala	Pro	Ala	Ile	Ser	Leu	Ser
145					150					155					160
Ala	Ala	Ala	Gly	Ile	Gly	Val	Asp	Asp	Leu	Arg	Arg	Leu	Cys	Ile	Leu
			165					170						175	
Arg	Met	Ser	Phe	Val	Lys	Gly	Trp	Gly	Pro	Asp	Tyr	Pro	Arg	Gln	Ser
			180					185					190		
Ile	Lys	Glu	Thr	Pro	Cys	Trp	Ile	Glu	Ile	His	Leu	His	Arg	Ala	Leu
		195					200					205			
Gln	Leu	Leu	Asp												
			210												

<210> 115
 <211> 50
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(50)
 <223> Xaa = Any Amino Acid

<400> 115															
Leu	Cys	Gly	Xaa	Xaa	Leu	Val	Glu	Ala	Leu	Xaa	Xaa	Val	Cys	Gly	Xaa
1				5					10					15	
Arg	Gly	Phe	Phe	Tyr	Thr	Pro	Lys	Thr	Arg	Arg	Lys	Arg	Gly	Ile	Val
			20					25					30		

Glu Gln Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Gln Leu Glu Xaa Tyr
 35 40 45
 Cys Asn
 50

<210> 116
 <211> 39
 <212> PRT
 <213> Caenorhabditis elegans

<400> 116
 Leu Cys Gly Arg His Leu Ala Asp Ala Leu Tyr Phe Val Cys Gly Asn
 1 5 10 15
 Arg Gly Phe Gly Ile Val Glu Glu Cys Cys His Asn Pro Cys Thr Leu
 20 25 30
 Tyr Gln Leu Glu Asn Tyr Cys
 35

<210> 117
 <211> 112
 <212> PRT
 <213> Caenorhabditis elegans

<400> 117
 Met Asn Ser Val Phe Thr Ile Ile Phe Val Leu Cys Ala Leu Gln Val
 1 5 10 15
 Ala Ala Ser Phe Arg Gln Ser Phe Gly Pro Ser Met Ser Glu Glu Ser
 20 25 30
 Ala Ser Met Gln Leu Leu Arg Glu Leu Gln His Asn Met Met Glu Ser
 35 40 45
 Ala His Arg Pro Met Pro Arg Ala Arg Arg Val Pro Ala Pro Gly Glu
 50 55 60
 Thr Arg Ala Cys Gly Arg Lys Leu Ile Ser Leu Val Met Ala Val Cys
 65 70 75 80
 Gly Asp Leu Cys Asn Pro Gln Glu Gly Lys Asp Ile Ala Thr Glu Cys
 85 90 95
 Cys Gly Asn Gln Cys Ser Asp Asp Tyr Ile Arg Ser Ala Cys Cys Pro
 100 105 110

<210> 118
 <211> 106
 <212> PRT
 <213> Caenorhabditis elegans

<400> 118
 Met Phe Ser Phe Phe Thr Tyr Phe Leu Leu Ser Ala Leu Leu Leu Ser
 1 5 10 15
 Ala Ser Cys Arg Gln Pro Ser Met Asp Thr Ser Lys Ala Asp Arg Ile
 20 25 30
 Leu Arg Glu Ile Glu Met Glu Thr Glu Leu Glu Asn Gln Leu Ser Arg
 35 40 45
 Ala Arg Arg Val Pro Ala Gly Glu Val Arg Ala Cys Gly Arg Arg Leu
 50 55 60
 Leu Leu Phe Val Trp Ser Thr Cys Gly Glu Pro Cys Thr Pro Gln Glu
 65 70 75 80
 Asp Met Asp Ile Ala Thr Val Cys Cys Thr Thr Gln Cys Thr Pro Ser

				85					90		95
Tyr	Ile	Lys	Gln	Ala	Cys	Cys	Pro	Glu	Lys		
			100					105			

<210> 119
 <211> 105
 <212> PRT
 <213> Caenorhabditis elegans

<400> 119
 Met Pro Pro Ile Ile Leu Val Phe Phe Leu Val Leu Ile Pro Ala Ser
 1 5 10 15
 Gln Gln Tyr Pro Phe Ser Leu Glu Ser Leu Asn Asp Gln Ile Ile Asn
 20 25 30
 Glu Glu Val Ile Glu Tyr Met Leu Glu Asn Ser Ile Arg Ser Ser Arg
 35 40 45
 Thr Arg Arg Val Pro Asp Glu Lys Lys Ile Tyr Arg Cys Gly Arg Arg
 50 55 60
 Ile His Ser Tyr Val Phe Ala Val Cys Gly Lys Ala Cys Glu Ser Asn
 65 70 75 80
 Thr Glu Val Asn Ile Ala Ser Lys Cys Cys Arg Glu Glu Cys Thr Asp
 85 90 95
 Asp Phe Ile Arg Lys Gln Cys Cys Pro
 100 105

<210> 120
 <211> 118
 <212> PRT
 <213> Caenorhabditis elegans

<400> 120
 Met Ile Val Thr Leu Ile Val Phe Leu Val Ile Gly Leu Gln Met Ala
 1 5 10 15
 His Leu Ser Gln Val Ser Gly Asn Asn Glu Asn Gly Phe Leu Asn Pro
 20 25 30
 Phe Asp Leu Ser Gln Trp Ser Glu Ile Leu His Arg Gln Tyr His
 35 40 45
 His His His His His His His Gly Asn Arg Ala Arg Arg Thr Leu Glu
 50 55 60
 Thr Glu Lys Ile Tyr Arg Cys Gly Arg Lys Leu Tyr Thr Asp Val Leu
 65 70 75 80
 Ser Ala Cys Asn Gly Pro Cys Glu Pro Gly Thr Glu Gln Asp Leu Ser
 85 90 95
 Lys Leu Cys Cys Gly Asn Gln Cys Thr Phe Val Glu Ile Arg Lys Ala
 100 105 110
 Cys Cys Ala Asp Lys Leu
 115

<210> 121
 <211> 106
 <212> PRT
 <213> Caenorhabditis elegans

<400> 121
 Met Asn Ala Ile Ile Phe Cys Leu Leu Phe Thr Thr Val Thr Ala Thr
 1 5 10 15

Tyr	Glu	Val	Phe	Gly	Lys	Gly	Ile	Glu	His	Arg	Asn	Glu	His	Leu	Ile
			20					25					30		
Ile	Asn	Gln	Leu	Asp	Ile	Ile	Pro	Val	Glu	Ser	Thr	Pro	Thr	Pro	Asn
		35					40					45			
Arg	Ala	Ser	Arg	Val	Gln	Lys	Arg	Leu	Cys	Gly	Arg	Arg	Leu	Ile	Leu
	50					55					60				
Phe	Met	Leu	Ala	Thr	Cys	Gly	Glu	Cys	Asp	Thr	Asp	Ser	Ser	Glu	Asp
65					70					75					80
Leu	Ser	His	Ile	Cys	Cys	Ile	Lys	Gln	Cys	Asp	Val	Gln	Asp	Ile	Ile
				85					90					95	
Arg	Val	Cys	Cys	Pro	Asn	Ser	Phe	Arg	Lys						
			100					105							

<210> 122
 <211> 107
 <212> PRT
 <213> Caenorhabditis elegans

Met	Lys	Leu	Ser	Val	Val	Leu	Ala	Leu	Phe	Ile	Ile	Phe	Gln	Leu	Gly
1				5					10					15	
Ala	Ala	Ser	Leu	Met	Arg	Asn	Trp	Met	Phe	Asp	Phe	Glu	Lys	Glu	Leu
			20					25					30		
Glu	His	Asp	Tyr	Asp	Asp	Ser	Glu	Ile	Gly	Phe	His	Asn	Ile	His	Ser
		35					40					45			
Leu	Met	Ala	Arg	Ser	Arg	Arg	Gly	Asp	Lys	Val	Lys	Ile	Cys	Gly	Thr
	50					55					60				
Lys	Val	Leu	Lys	Met	Val	Met	Val	Met	Cys	Gly	Gly	Glu	Cys	Ser	Ser
65				70					75						80
Thr	Asn	Glu	Asn	Ile	Ala	Thr	Glu	Cys	Cys	Glu	Lys	Met	Cys	Thr	Met
				85					90					95	
Glu	Asp	Ile	Thr	Thr	Lys	Cys	Cys	Pro	Ser	Arg					
			100					105							

<210> 123
 <211> 73
 <212> PRT
 <213> Caenorhabditis elegans

Met	Lys	Leu	Leu	His	Ile	Phe	Ile	Ile	Phe	Leu	Leu	Phe	Gln	Ser	Cys
1				5					10					15	
Ser	Asn	Lys	Met	Cys	Gln	Tyr	Ser	Lys	Lys	Lys	Tyr	Lys	Ile	Cys	Gly
			20					25					30		
Val	Arg	Ala	Leu	Lys	His	Met	Lys	Val	Tyr	Cys	Thr	Arg	Gly	Met	Thr
		35					40					45			
Arg	Asp	Tyr	Gly	Lys	Leu	Leu	Val	Thr	Cys	Cys	Ser	Lys	Gly	Cys	Asn
	50					55					60				
Ala	Ile	Asp	Ile	Gln	Arg	Ile	Cys	Leu							
65				70											

<210> 124
 <211> 109
 <212> PRT
 <213> Caenorhabditis elegans

<400> 124

```
Met Tyr Trp Phe Arg Gln Val Tyr Arg Pro Ser Phe Phe Phe Gly Phe
 1          5          10          15
Leu Ala Ile Leu Leu Leu Ser Ser Pro Thr Pro Ser Asp Ala Ser Ile
          20          25          30
Arg Leu Cys Gly Ser Arg Leu Thr Thr Thr Leu Leu Ala Val Cys Arg
          35          40          45
Asn Gln Leu Cys Thr Gly Leu Thr Ala Phe Lys Arg Ser Ala Asp Gln
          50          55          60
Ser Tyr Ala Pro Thr Thr Arg Asp Leu Phe His Ile His His Gln Gln
65          70          75          80
Lys Arg Gly Gly Ile Ala Thr Glu Cys Cys Glu Lys Arg Cys Ser Phe
          85          90          95
Ala Tyr Leu Lys Thr Phe Cys Cys Asn Gln Asp Asp Asn
          100          105
```

<210> 125

<211> 110

<212> PRT

<213> Homo sapiens

<400> 125

```
Met Ala Leu Trp Met Arg Leu Leu Pro Leu Leu Ala Leu Leu Ala Leu
 1          5          10          15
Trp Gly Pro Asp Pro Ala Ala Ala Phe Val Asn Gln His Leu Cys Gly
          20          25          30
Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe
          35          40          45
Phe Tyr Thr Pro Lys Thr Arg Glu Ala Glu Asp Leu Gln Val Gly
          50          55          60
Gln Val Glu Leu Gly Gly Gly Pro Gly Ala Gly Ser Leu Gln Pro Leu
65          70          75          80
Ala Leu Glu Gly Ser Leu Gln Lys Arg Gly Ile Val Glu Gln Cys Cys
          85          90          95
Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
          100          105          110
```

<210> 126

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 126

```
Ala Cys Gly Arg Arg Leu Leu Leu Phe Val Trp Ser Thr Cys Gly Glu
 1          5          10          15
Pro Cys Thr Xaa Xaa Xaa Gln Glu Asp Met Asp Ile Ala Thr Val Cys
          20          25          30
Cys Thr Thr Gln Cys Thr Pro Ser Tyr Ile Lys Gln Ala Cys
          35          40          45
```

<210> 127

<211> 46
 <212> PRT
 <213> *Caenorhabditis elegans*

 <220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

 <400> 127
 Ala Cys Gly Arg Lys Leu Ile Ser Leu Val Met Ala Val Cys Gly Asp
 1 5 10 15
 Leu Cys Asn Xaa Xaa Xaa Gln Glu Gly Lys Asp Ile Ala Thr Glu Cys
 20 25 30
 Cys Gly Asn Gln Cys Ser Asp Asp Tyr Ile Arg Ser Ala Cys
 35 40 45

<210> 128
 <211> 46
 <212> PRT
 <213> *Caenorhabditis elegans*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 128
 Arg Cys Gly Arg Arg Ile His Ser Tyr Val Phe Ala Val Cys Gly Lys
 1 5 10 15
 Ala Cys Glu Xaa Xaa Xaa Ser Thr Glu Val Asn Ile Ala Ser Lys Cys
 20 25 30
 Cys Arg Glu Glu Cys Thr Asp Asp Phe Ile Arg Lys Gln Cys
 35 40 45

<210> 129
 <211> 46
 <212> PRT
 <213> *Caenorhabditis elegans*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 129
 Arg Cys Gly Arg Lys Leu Tyr Thr Asp Val Leu Ser Ala Cys Asn Gly
 1 5 10 15
 Pro Cys Glu Xaa Xaa Xaa Gly Thr Glu Gln Asp Leu Ser Lys Leu Cys
 20 25 30
 Cys Gly Asn Gln Cys Thr Phe Asx Glu Ile Arg Lys Ala Cys
 35 40 45

<210> 130
 <211> 46
 <212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 130

Ile	Cys	Gly	Thr	Lys	Asx	Leu	Lys	Met	Val	Met	Val	Met	Cys	Gly	Gly
1				5				10						15	
Glu	Cys	Ser	Xaa	Xaa	Xaa	Ser	Thr	Asn	Glu	Asn	Ile	Ala	Thr	Glu	Cys
			20					25					30		
Cys	Glu	Lys	Met	Cys	Thr	Met	Glu	Asp	Ile	Thr	Thr	Lys	Cys		
		35					40					45			

<210> 131

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 131

Leu	Cys	Gly	Arg	Arg	Leu	Ile	Leu	Phe	Met	Leu	Ala	Thr	Cys	Gly	Glu
1				5				10						15	
Cys	Asp	Thr	Xaa	Xaa	Xaa	Asp	Ser	Ser	Glu	Asp	Leu	Ser	His	Ile	Cys
			20					25					30		
Cys	Ile	Lys	Gln	Cys	Asp	Val	Gln	Asp	Ile	Ile	Arg	Val	Cys		
		35					40					45			

<210> 132

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 132

Leu	Cys	Gly	Ser	His	Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu
1				5				10						15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Leu	Gln	Lys	Arg	Gly	Ile	Val	Glu	Gln	Cys
			20					25					30		
Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys		
		35					40					45			

<210> 133

<211> 46

<212> PRT

<213> Rabbit

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 133
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Thr Pro Lys Ser Gly Ile Val Glu Gln Cys
 20 25 30
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys
 35 40 45

<210> 134
 <211> 46
 <212> PRT
 <213> *Xenopus laevis*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 134
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg Gly Ile Val Glu Gln Cys
 20 25 30
 Cys His Ser Thr Cys Ser Leu Phe Gln Leu Glu Ser Tyr Cys
 35 40 45

<210> 135
 <211> 46
 <212> PRT
 <213> *Xenopus laevis*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 135
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg Gly Ile Val Glu Gln Cys
 20 25 30
 Cys His Ser Thr Cys Ser Leu Phe Gln Leu Glu Asn Tyr Cys
 35 40 45

<210> 136
 <211> 46
 <212> PRT
 <213> Alligator

<220>
 <221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 136

Leu	Cys	Gly	Ser	His	Leu	Val	Asp	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Ser	Pro	Lys	Gly	Gly	Ile	Val	Glu	Gln	Cys
			20					25					30		
Cys	His	Asn	Thr	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys		
		35					40					45			

<210> 137

<211> 46

<212> PRT

<213> Elephant fish

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 137

Leu	Cys	Gly	Ser	His	Leu	Val	Asp	Ala	Leu	Tyr	Phe	Val	Cys	Gly	Glu
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Pro	Lys	Gln	Ile	Gly	Ile	Val	Glu	Gln	Cys
			20					25					30		
Cys	His	Asn	Thr	Cys	Ser	Leu	Val	Asn	Leu	Glu	Gly	Tyr	Cys		
		35					40					45			

<210> 138

<211> 46

<212> PRT

<213> Bos taurus

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 138

Leu	Cys	Gly	Ala	Glu	Leu	Val	Asp	Ala	Leu	Gln	Phe	Val	Cys	Gly	Asp
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Ala	Pro	Gln	Thr	Gly	Ile	Val	Asp	Glu	Cys
			20					25					30		
Cys	Phe	Arg	Ser	Cys	Asp	Leu	Arg	Arg	Leu	Glu	Met	Tyr	Cys		
		35					40					45			

<210> 139

<211> 46

<212> PRT

<213> Canis

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 139
 Leu Cys Gly Ala Glu Leu Val Asp Ala Leu Gln Phe Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Ala Pro Gln Thr Gly Ile Val Asp Glu Cys
 20 25 30
 Cys Phe Arg Ser Cys Asp Leu Arg Arg Leu Glu Met Tyr Cys
 35 40 45

<210> 140
 <211> 46
 <212> PRT
 <213> Horse

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 140
 Leu Cys Gly Gly Glu Leu Val Asp Thr Leu Gln Phe Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Arg Arg Ser Arg Gly Ile Val Glu Glu Cys
 20 25 30
 Cys Phe Arg Ser Cys Asp Leu Ala Leu Leu Glu Thr Tyr Cys
 35 40 45

<210> 141
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 141
 Leu Cys Gly Gly Glu Leu Val Asp Thr Leu Gln Phe Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Arg Arg Ser Arg Gly Ile Val Glu Glu Cys
 20 25 30
 Cys Phe Arg Ser Cys Asp Leu Ala Leu Leu Glu Thr Tyr Cys
 35 40 45

<210> 142
 <211> 46
 <212> PRT
 <213> Amphioxus

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 142
 Leu Cys Gly Ser Thr Leu Ala Asp Val Leu Ser Phe Val Cys Gly Asn

1		5		10		15									
Arg	Gly	Tyr	Xaa	Xaa	Xaa	Arg	Arg	Arg	Arg	Gly	Leu	Val	Glu	Glu	Cys
			20					25					30		
Cys	Tyr	Asn	Val	Cys	Asp	Tyr	Ser	Gln	Leu	Glu	Ser	Tyr	Cys		
		35					40					45			

<210> 143
 <211> 46
 <212> PRT
 <213> Locust

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 143
Tyr Cys Gly Glu Lys Leu Ser Asn Ala Leu Lys Leu Val Cys Arg Gly
1 5 10 15
Asn Tyr Asn Xaa Xaa Xaa Arg Arg Thr Arg Gly Val Phe Asp Glu Cys
20 25 30
Cys Arg Lys Ser Cys Ser Ile Ser Glu Leu Gln Thr Tyr Cys
35 40 45

<210> 144
 <211> 46
 <212> PRT
 <213> Bommo

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 144
Tyr Cys Gly Arg His Leu Ala Arg Thr Leu Ala Asp Leu Cys Trp Glu
1 5 10 15
Ala Gly Val Xaa Xaa Xaa Arg Gly Lys Arg Gly Ile Val Asp Glu Cys
20 25 30
Cys Leu Arg Pro Cys Ser Val Asp Val Leu Leu Ser Tyr Cys
35 40 45

<210> 145
 <211> 46
 <212> PRT
 <213> Bommo

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 145
Tyr Cys Gly Arg His Leu Ala Asp Thr Leu Ala Asp Leu Cys Phe Gly
1 5 10 15
Val Glu Lys Xaa Xaa Xaa Arg Gly Lys Arg Gly Val Val Asp Glu Cys

35

40

45

<210> 149
 <211> 46
 <212> PRT
 <213> *Bombys mori*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 149
 Tyr Cys Gly Arg Arg Leu Ala Ile Met Leu Ser Tyr Leu Cys Asp Asn
 1 5 10 15
 Gln Tyr Leu Xaa Xaa Xaa Gly Lys Arg Gln Gly Ile Ala Glu Glu Cys
 20 25 30
 Cys Asn Lys Pro Cys Thr Glu Asp Glu Leu Leu Gly Tyr Cys
 35 40 45

<210> 150
 <211> 46
 <212> PRT
 <213> *Caenorhabditis elegans*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 150
 Leu Cys Gly Ser Arg Leu Thr Thr Thr Leu Leu Ala Val Cys Arg Asn
 1 5 10 15
 Gln Leu Cys Xaa Xaa Xaa Gln Lys Arg Gly Gly Ile Ala Thr Glu Cys
 20 25 30
 Cys Glu Lys Arg Cys Ser Phe Ala Tyr Leu Lys Thr Phe Cys
 35 40 45

<210> 151
 <211> 46
 <212> PRT
 <213> *Moi* 3

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 151
 Leu Cys Gly Ser Thr Leu Ala Asn Met Val Gln Trp Leu Cys Ser Thr
 1 5 10 15
 Tyr Thr Thr Xaa Xaa Xaa Glu Ser Arg Pro Ser Ile Val Cys Glu Cys
 20 25 30
 Cys Phe Asn Gln Cys Thr Val Gln Glu Leu Leu Ala Tyr Cys
 35 40 45

<210> 152
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 152
 Leu Cys Gly Arg Glu Leu Val Arg Ala Gln Ile Ala Ile Cys Gly Met
 1 5 10 15
 Ser Thr Trp Xaa Xaa Arg Pro Tyr Val Ala Leu Phe Glu Lys Cys
 20 25 30
 Cys Leu Ile Gly Cys Thr Lys Arg Ser Leu Ala Lys Tyr Cys
 35 40 45

<210> 153
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 153
 Leu Cys Gly His His Phe Val Arg Ala Leu Val Arg Val Cys Gly Gly
 1 5 10 15
 Pro Arg Trp Xaa Xaa Xaa Ala Ala Ala Thr Asn Pro Ala Arg Tyr Cys
 20 25 30
 Cys Leu Ser Gly Cys Thr Gln Gln Asp Leu Leu Thr Leu Cys
 35 40 45

<210> 154
 <211> 541
 <212> PRT
 <213> Caenorhabditis elegans

<400> 154
 Met Ser Met Thr Ser Leu Ser Thr Lys Ser Arg Arg Gln Glu Asp Val
 1 5 10 15
 Val Ile Glu Gly Trp Leu His Lys Lys Gly Glu His Ile Arg Asn Trp
 20 25 30
 Arg Pro Arg Tyr Phe Met Ile Phe Asn Asp Gly Ala Leu Leu Gly Phe
 35 40 45
 Arg Ala Lys Pro Lys Glu Gly Gln Pro Phe Pro Glu Pro Leu Asn Asp
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 Asn Met Phe Met Val Arg Cys Leu Gln Trp Thr Thr Val Ile Glu Arg
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 Thr Phe Tyr Ala Glu Ser Ala Glu Val Arg Gln Arg Trp Ile His Ala
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 Ile Glu Ser Ile Ser Lys Lys Tyr Lys Gly Thr Asn Ala Asn Pro Gln

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Asn	Met	Phe	Met	Val	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile	Glu	Arg
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Thr	Phe	Tyr	Ala	Glu	Ser	Ala	Glu	Val	Arg	Gln	Arg	Trp	Ile	His	Ala
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Glu	Glu	Leu	Met	Glu	Thr	Asn	Gln	Gln	Pro	Lys	Ile	Asp	Glu	Asp	Ser
	130					135					140				
Glu	Phe	Ala	Gly	Ala	Ala	His	Ala	Ile	Met	Gly	Gln	Pro	Ser	Ser	Gly
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His	Gly	Asp	Asn	Cys	Ser	Ile	Asp	Phe	Arg	Ala	Ser	Met	Ile	Ser	Ile
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Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Lys	Gly	Thr	Phe	Gly	Lys	Val	Ile
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Leu	Cys	Lys	Glu	Lys	Arg	Thr	Gln	Lys	Leu	Tyr	Ala	Ile	Lys	Ile	Leu
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Glu	Asn	Arg	Val	Leu	Gln	Arg	Cys	Lys	His	Pro	Phe	Leu	Thr	Glu	Leu
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Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln	Ser	Glu	Thr
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Met	Gly														
545															

<210> 156
 <211> 483
 <212> PRT
 <213> Caenorhabditis elegans

<400> 156

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Pro	Lys	Glu	Asp	Gln	Pro	Leu	Pro	Glu	Pro	Leu	Asn	Asn	Phe	Met	Ile
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Arg	Asp	Ala	Ala	Thr	Val	Cys	Leu	Asp	Lys	Pro	Arg	Pro	Asn	Met	Phe
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Ile	Val	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile	Glu	Arg	Thr	Phe	Tyr
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Ala	Asp	Ser	Ala	Asp	Phe	Arg	Gln	Met	Trp	Ile	Glu	Ala	Ile	Gln	Ala
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Val	Ser	Ser	His	Asn	Arg	Leu	Lys	Glu	Asn	Ala	Gly	Asn	Thr	Ser	Met
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Gln	Glu	Glu	Asp	Thr	Asn	Gly	Asn	Pro	Ser	Gly	Glu	Ser	Asp	Val	Asn
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Met	Asn	Ile	Asp	Glu	Pro	Glu	Glu	Val	Pro	Arg	Lys	Asn	Thr	Val	Thr
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Lys	Ile	Ile	Arg	Lys	Glu	Met	Val	Val	Asp	Arg	Ser	Glu	Val	Ala	His
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Leu	Ala	Leu	Gly	Tyr	Leu	His	His	Arg	Asn	Ile	Val	Tyr	Arg	Asp	Met
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Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Ser	Ala	Lys	Glu	Asn	Gly	
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Lys	Leu	Phe	Glu	Leu	Ile	Thr	Thr	Cys	Asp	Leu	Lys	Phe	Pro	Asn	Arg	
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Pro	Ala	Lys	Arg	Leu	Gly	Ala	Gly	Pro	Asp	Asp	Ala	Arg	Glu	Val	Ser	
			420					425					430			
Arg	Ala	Glu	Phe	Phe	Lys	Asp	Val	Asp	Trp	Glu	Ala	Thr	Leu	Arg	Lys	
	435					440						445				
Glu	Val	Glu	Pro	Pro	Phe	Lys	Pro	Asn	Val	Met	Ser	Glu	Thr	Asp	Thr	
	450					455				460						
Ser	Phe	Phe	Asp	Arg	Val	Arg	Tyr	Val	Ser	Ile	Leu	Leu	Lys	Val	Ser	
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<210> 157
 <211> 480
 <212> PRT
 <213> Homo sapiens

<400> 157

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	50				55					60					
Thr	Glu	Arg	Pro	Arg	Pro	Asn	Thr	Phe	Ile	Ile	Arg	Cys	Leu	Gln	Trp
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Glu	Glu	Trp	Thr	Thr	Ala	Ile	Gln	Thr	Val	Ala	Asp	Gly	Leu	Lys	Lys
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Gln	Glu	Glu	Glu	Glu	Met	Asp	Phe	Arg	Ser	Gly	Ser	Pro	Ser	Asp	Asn
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Ser	Gly	Ala	Glu	Glu	Met	Glu	Val	Ser	Leu	Ala	Lys	Pro	Lys	His	Arg
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Val	Thr	Met	Asn	Glu	Phe	Glu	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr
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Phe	Gly	Lys	Val	Ile	Leu	Val	Lys	Glu	Lys	Ala	Thr	Gly	Arg	Tyr	Tyr
			165					170					175		
Ala	Met	Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Val	Ala	Lys	Asp	Glu	Val
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210						215					220				

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<211> 632

<212> PRT

<213> *Caenorhabditis elegans*

<400> 159

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			20					25					30		
Leu	Thr	Pro	Thr	Ala	Ser	Glu	Ser	Glu	Asn	Ser	Leu	Ser	Pro	Val	Thr
			35				40					45			
Ala	Glu	Asp	Leu	Ile	Ala	Lys	Ser	Ile	Lys	Glu	Gly	Cys	Pro	Lys	Arg
	50					55					60				
Thr	Ser	Asn	Asp	Phe	Met	Phe	Leu	Gln	Ser	Met	Gly	Glu	Gly	Ala	Tyr
65					70					75					80
Ser	Gln	Val	Phe	Arg	Cys	Arg	Glu	Val	Ala	Thr	Asp	Ala	Met	Phe	Ala
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Val	Lys	Val	Leu	Gln	Lys	Ser	Tyr	Leu	Asn	Arg	His	Gln	Lys	Met	Asp
			100					105					110		
Ala	Ile	Ile	Arg	Glu	Lys	Asn	Ile	Leu	Thr	Tyr	Leu	Ser	Gln	Glu	Cys
		115					120					125			
Gly	Gly	His	Pro	Phe	Val	Thr	Gln	Leu	Tyr	Thr	His	Phe	His	Asp	Gln
	130					135					140				
Ala	Arg	Ile	Tyr	Phe	Val	Ile	Gly	Leu	Val	Glu	Asn	Gly	Asp	Leu	Gly
145					150					155					160
Glu	Ser	Leu	Cys	His	Phe	Gly	Ser	Phe	Asp	Met	Leu	Thr	Ser	Lys	Phe
				165					170					175	
Phe	Ala	Ser	Glu	Ile	Leu	Thr	Gly	Leu	Gln	Phe	Leu	His	Asp	Asn	Lys

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<210> 160
 <211> 636
 <212> PRT
 <213> Caenorhabditis elegans

<400> 160
 Met Glu Asp Leu Thr Pro Thr Asn Thr Ser Leu Asp Thr Thr Thr Thr
 1 5 10 15
 Asn Asn Asp Thr Thr Ser Asp Arg Glu Ala Ala Pro Thr Thr Leu Asn
 20 25 30
 Leu Thr Pro Thr Ala Ser Glu Ser Glu Asn Ser Leu Ser Pro Val Thr
 35 40 45
 Ala Glu Asp Leu Ile Ala Lys Ser Ile Lys Glu Gly Cys Pro Lys Arg
 50 55 60
 Thr Ser Asn Asp Phe Met Phe Leu Gln Ser Met Gly Glu Gly Ala Tyr
 65 70 75 80
 Ser Gln Val Phe Arg Cys Arg Glu Val Ala Thr Asp Ala Met Phe Ala
 85 90 95
 Val Lys Val Leu Gln Lys Ser Tyr Leu Asn Arg His Gln Lys Met Asp
 100 105 110
 Ala Ile Ile Arg Glu Lys Asn Ile Leu Thr Tyr Leu Ser Gln Glu Cys
 115 120 125
 Gly Gly His Pro Phe Val Thr Gln Leu Tyr Thr His Phe His Asp Gln
 130 135 140
 Ala Arg Ile Tyr Phe Val Ile Gly Leu Val Glu Asn Gly Asp Leu Gly
 145 150 155 160
 Glu Ser Leu Cys His Phe Gly Ser Phe Asp Met Leu Thr Ser Lys Phe
 165 170 175
 Phe Ala Ser Glu Ile Leu Thr Gly Leu Gln Phe Leu His Asp Asn Lys
 180 185 190
 Ile Val His Arg Asp Met Lys Pro Asp Asn Val Leu Ile Gln Lys Asp
 195 200 205
 Gly His Ile Leu Ile Thr Asp Phe Gly Ser Ala Gln Ala Phe Gly Gly
 210 215 220
 Leu Gln Leu Ser Gln Glu Gly Phe Thr Asp Ala Asn Gln Ala Ser Ser
 225 230 235 240
 Arg Ser Ser Asp Ser Gly Ser Pro Pro Pro Thr Arg Phe Tyr Ser Asp
 245 250 255
 Glu Glu Val Pro Glu Glu Asn Thr Ala Arg Arg Thr Thr Phe Val Gly
 260 265 270
 Thr Ala Leu Tyr Val Ser Pro Glu Met Leu Ala Asp Gly Asp Val Gly
 275 280 285
 Pro Gln Thr Asp Ile Trp Gly Leu Gly Cys Ile Leu Phe Gln Cys Leu
 290 295 300
 Ala Gly Gln Pro Pro Phe Arg Ala Val Asn Gln Tyr His Leu Leu Lys
 305 310 315 320
 Arg Ile Gln Glu Leu Asp Phe Ser Phe Pro Glu Gly Phe Pro Glu Glu
 325 330 335
 Ala Ser Glu Ile Ile Ala Lys Ile Leu Val Arg Asp Pro Ser Thr Arg
 340 345 350
 Ile Thr Ser Gln Glu Leu Met Ala His Lys Phe Phe Glu Asn Val Asp
 355 360 365
 Trp Val Asn Ile Ala Asn Ile Lys Pro Pro Val Leu His Ala Tyr Ile
 370 375 380
 Pro Ala Thr Phe Gly Glu Pro Glu Tyr Tyr Ser Asn Ile Gly Pro Val
 385 390 395 400
 Glu Pro Gly Leu Asp Asp Arg Ala Leu Phe Arg Leu Met Asn Leu Gly
 405 410 415
 Asn Asp Ala Ser Ala Ser Gln Pro Ser Thr Phe Arg Pro Ser Asn Val

<212> PRT
<213> Homo sapiens

<400> 163
Ser Pro Gly Ser Gln Phe Ser Lys Trp Pro Ala Ser Pro Gly Ser His
1 5 10 15
Ser Asn Asp Asp Phe Asp Asn Trp Ser Thr Phe Arg Pro Arg Thr Ser
20 25 30
Ser Asn Ala Ser Thr Ile Ser Gly Arg Leu Ser Pro Ile Met Thr Glu
35 40 45
Gln Asp Asp Leu Gly Glu
50

<210> 164
<211> 17
<212> PRT
<213> Caenorhabditis elegans

<400> 164
Ser Phe Arg Pro Arg Thr Gln Ser Asn Leu Ser Ile Pro Gly Ser Ser
1 5 10 15
Ser

<210> 165
<211> 42
<212> PRT
<213> Homo sapiens

<400> 165
Lys Ala Ala Ala Ile Ile Asp Leu Asp Pro Asp Phe Glu Pro Gln Ser
1 5 10 15
Arg Pro Arg Ser Cys Thr Trp Pro Leu Pro Arg Pro Glu Ile Ala Asn
20 25 30
Gln Pro Ser Glu Pro Pro Glu Val Glu Pro
35 40

<210> 166
<211> 22
<212> PRT
<213> Homo sapiens

<400> 166
Ala Asp Pro Asp Phe Glu Pro Arg Pro Arg Ser Cys Thr Trp Pro Leu
1 5 10 15
Pro Arg Pro Glu Ser Pro
20

<210> 167
<211> 42
<212> PRT
<213> Homo sapiens

<400> 167
Glu Ala Pro Gln Val Val Glu Ile Asp Pro Asp Phe Glu Pro Leu Pro

1 5 10 15
 Arg Pro Arg Ser Cys Thr Trp Pro Leu Pro Arg Pro Glu Phe Ser Gln
 20 25 30
 Ser Asn Ser Ala Thr Ser Ser Pro Ala Pro
 35 40

<210> 168
 <211> 41
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 168
 Thr Phe Met Asn Thr Pro Asp Asp Val Met Met Asn Asp Asp Met Glu
 1 5 10 15
 Pro Ile Pro Arg Asp Arg Cys Asn Thr Trp Pro Met Arg Arg Pro Gln
 20 25 30
 Leu Glu Pro Pro Leu Asn Ser Ser Pro
 35 40

<210> 169
 <211> 14
 <212> PRT
 <213> *Caenorhabditis elegans* or *Homo sapiens*

<400> 169
 Thr Pro Val Asp Glu Pro Pro Arg Arg Thr Trp Pro Arg Pro
 1 5 10

<210> 170
 <211> 80
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens*

<400> 170
 Leu Glu Lys Gln Ala Gly Gly Asn Pro Trp His Gln Phe Val Glu Asn
 1 5 10 15
 Asn Leu Ile Leu Lys Met Gly Pro Val Asp Lys Arg Lys Gly Leu Phe
 20 25 30
 Ala Arg Arg Arg Gln Leu Leu Leu Thr Glu Gly Pro His Leu Tyr Tyr
 35 40 45
 Val Asp Pro Val Asn Lys Val Leu Lys Gly Glu Ile Pro Trp Ser Gln
 50 55 60
 Glu Leu Arg Pro Glu Ala Lys Asn Phe Lys Thr Phe Phe Val His Thr
 65 70 75 80

<210> 171
 <211> 47
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens* or *C. elegans*

<400> 171
 Leu Glu Gln Asn Pro His Phe Asn Leu Ile Leu Lys Gly Lys Gly Leu
 1 5 10 15
 Phe Ala Arg Arg Arg Leu Leu Thr Glu Gly Pro His Leu Tyr Asp Asn
 20 25 30

Val Leu Lys Gly Glu Pro Trp Glu Lys Asn Thr Phe Phe His Thr
 35 40 45

<210> 172
 <211> 80
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 172
 Leu Glu Glu Gln Arg Val Lys Asn Pro Phe His Ile Phe Thr Asn Asn
 1 5 10 15
 Ser Leu Ile Leu Lys Gln Gly Tyr Leu Glu Lys Lys Arg Gly Leu Phe
 20 25 30
 Ala Arg Arg Arg Met Phe Leu Leu Thr Glu Gly Pro His Leu Leu Tyr
 35 40 45
 Ile Asp Val Pro Asn Leu Val Leu Lys Gly Glu Val Pro Trp Thr Pro
 50 55 60
 Cys Met Gln Val Glu Leu Lys Asn Ser Gly Thr Phe Phe Ile His Thr
 65 70 75 80

<210> 173
 <211> 113
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens*

<400> 173
 Ser Asp Leu Trp Ala Leu Gly Cys Ile Ile Tyr Gln Leu Val Ala Gly
 1 5 10 15
 Leu Pro Pro Phe Arg Ala Gly Asn Glu Tyr Leu Ile Phe Gln Lys Ile
 20 25 30
 Ile Lys Leu Glu Tyr Asp Phe Pro Glu Lys Phe Phe Pro Lys Ala Arg
 35 40 45
 Asp Leu Val Glu Lys Leu Leu Val Leu Asp Ala Thr Lys Arg Leu Gly
 50 55 60
 Cys Glu Glu Met Glu Gly Tyr Gly Pro Leu Lys Ala His Pro Phe Phe
 65 70 75 80
 Glu Ser Val Thr Trp Glu Asn Leu His Gln Gln Thr Pro Pro Lys Leu
 85 90 95
 Thr Ala Tyr Leu Pro Ala Met Ser Glu Asp Asp Glu Asp Cys Tyr Gly
 100 105 110
 Asn

<210> 174
 <211> 48
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens* or *C. elegans*

<400> 174
 Asp Trp Leu Gly Cys Ile Gln Ala Gly Pro Pro Phe Arg Ala Asn Tyr
 1 5 10 15
 Ile Leu Phe Pro Glu Phe Ala Lys Leu Val Leu Glu Pro Leu Ala His
 20 25 30
 Phe Phe Glu Val Trp Asn Pro Pro Leu Ala Tyr Pro Ala Glu Tyr Asn
 35 40 45

<210> 175
 <211> 122
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 175
 Thr Asp Ile Trp Gly Leu Gly Cys Ile Leu Phe Gln Cys Leu Ala Gly
 1 5 10 15
 Gln Pro Pro Phe Arg Ala Val Asn Gln Tyr His Leu Leu Lys Arg Ile
 20 25 30
 Gln Glu Leu Asp Phe Ser Phe Pro Glu Gly Phe Pro Glu Glu Ala Ser
 35 40 45
 Glu Ile Ile Ala Lys Ile Leu Val Gly His Glu Thr Leu Lys Thr Glu
 50 55 60
 Tyr Val Ile Phe Asn Leu Gln Val Arg Asp Pro Ser Thr Arg Ile Thr
 65 70 75 80
 Ser Gln Glu Leu Met Ala His Lys Phe Phe Glu Asn Val Asp Trp Val
 85 90 95
 Asn Ile Ala Asn Ile Lys Pro Pro Val Leu His Ala Tyr Ile Pro Ala
 100 105 110
 Thr Phe Gly Glu Pro Glu Tyr Tyr Ser Asn
 115 120

<210> 176
 <211> 72
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens*

<400> 176
 Phe Gly Leu Ser Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr Ile Arg
 1 5 10 15
 Lys Ile Gly Ser Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr Ala Glu
 20 25 30
 Ile Val Ser Ala Leu Glu Tyr Leu His Gly Lys Gly Ile Ile His Arg
 35 40 45
 Asp Leu Lys Pro Glu Asn Ile Leu Leu Asn Glu Asp Met His Ile Gln
 50 55 60
 Ile Thr Asp Phe Gly Thr Ala Lys
 65 70

<210> 177
 <211> 31
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens* or *C. elegans*

<400> 177
 Phe Asn Gly Leu Gly Ser Phe Asp Phe Glu Ile Leu Leu His Ile His
 1 5 10 15
 Arg Asp Lys Pro Asn Leu Asp His Ile Ile Thr Asp Phe Gly Ala
 20 25 30

<210> 178
 <211> 72
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 178
Phe Val Ile Gly Leu Val Glu Asn Gly Asp Leu Gly Glu Ser Leu Cys
1 5 10 15
His Phe Gly Ser Phe Asp Met Leu Thr Ser Lys Phe Phe Ala Ser Glu
20 25 30
Ile Leu Thr Gly Leu Gln Phe Leu His Asp Asn Lys Ile Val His Arg
35 40 45
Asp Met Lys Pro Asp Asn Val Leu Ile Gln Lys Asp Gly His Ile Leu
50 55 60
Ile Thr Asp Phe Gly Ser Ala Gln
65 70

<210> 179
<211> 48
<212> PRT
<213> Mus musculus or Homo sapiens

<400> 179
Tyr Ala Ile Lys Ile Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys
1 5 10 15
Val Pro Tyr Val Thr Arg Glu Arg Asp Val Met Ser Arg Leu Asp His
20 25 30
Pro Phe Phe Val Lys Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys Leu
35 40 45

<210> 180
<211> 15
<212> PRT
<213> Mus musculus or Homo sapiens or C elegans

<400> 180
Ala Lys Leu Lys Lys Arg Glu Leu His Pro Phe Leu Tyr Phe Asp
1 5 10 15

<210> 181
<211> 53
<212> PRT
<213> Caenorhabditis elegans

<400> 181
Phe Ala Val Lys Val Leu Gln Lys Ser Tyr Leu Asn Arg His Gln Lys
1 5 10 15
Met Asp Ala Ile Ile Arg Glu Lys Asn Ile Leu Thr Tyr Leu Ser Gln
20 25 30
Glu Cys Gly Gly His Pro Phe Val Thr Gln Leu Tyr Thr His Phe His
35 40 45
Asp Gln Ala Arg Ile
50

<210> 182
<211> 29
<212> PRT
<213> Mus musculus or Homo sapiens

<400> 182

Pro Asn Arg Thr Tyr Tyr Leu Met Asp Pro Ser Gly Asn Ala His Lys
 1 5 10 15
 Trp Cys Arg Lys Ile Gln Glu Val Trp Arg Gln Arg Tyr
 20 25

<210> 183
 <211> 15
 <212> PRT
 <213> Mus musculus or Homo sapiens or C elegans

<400> 183
 Pro Asn Arg Tyr Tyr Leu Asp Ala Trp Cys Ile Val Arg Arg Tyr
 1 5 10 15

<210> 184
 <211> 28
 <212> PRT
 <213> Caenorhabditis elegans

<400> 184
 Pro Asn Arg Val Tyr Tyr Leu Phe Asp Leu Glu Lys Lys Ala Asp Glu
 1 5 10 15
 Trp Cys Lys Ala Ile Asn Asp Val Arg Lys Arg Tyr
 20 25

<210> 185
 <211> 25
 <212> PRT
 <213> Mus musculus or Homo sapiens

<400> 185
 Pro Glu Ser Lys Gln Ala Arg Ala Asn Ser Phe Val Gly Thr Ala Gln
 1 5 10 15
 Tyr Val Ser Pro Glu Leu Leu Thr Glu
 20 25

<210> 186
 <211> 15
 <212> PRT
 <213> Mus musculus or Homo sapiens or C elegans

<400> 186
 Pro Glu Ala Arg Phe Val Gly Thr Ala Tyr Val Ser Pro Glu Leu
 1 5 10 15

<210> 187
 <211> 25
 <212> PRT
 <213> Caenorhabditis elegans

<400> 187
 Pro Glu Glu Asn Thr Ala Arg Arg Thr Thr Phe Val Gly Thr Ala Leu
 1 5 10 15
 Tyr Val Ser Pro Glu Met Leu Ala Asp

20

25

<210> 188
 <211> 62
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 188
 Lys Arg Thr Ser Asn Asp Phe Met Phe Leu Gln Ser Met Gly Glu Gly
 1 5 10 15
 Ala Tyr Ser Gln Val Phe Arg Cys Arg Glu Val Ala Thr Asp Ala Met
 20 25 30
 Phe Ala Val Lys Val Leu Gln Lys Ser Tyr Leu Asn Arg His Gln Lys
 35 40 45
 Met Asp Ala Ile Ile Arg Glu Lys Asn Ile Leu Thr Tyr Leu
 50 55 60

<210> 189
 <211> 21
 <212> PRT
 <213> *Caenorhabditis elegans* or *Homo sapiens*

<400> 189
 Lys Asp Phe Phe Gly Glu Gly Ser Val Arg Glu Ala Thr Ala Lys Leu
 1 5 10 15
 Lys Lys Arg Glu Leu
 20

<210> 190
 <211> 62
 <212> PRT
 <213> *Homo sapiens*

<400> 190
 Lys Lys Arg Pro Glu Asp Phe Lys Phe Gly Lys Ile Leu Gly Glu Gly
 1 5 10 15
 Ser Phe Ser Thr Val Val Leu Ala Arg Glu Leu Ala Thr Ser Arg Glu
 20 25 30
 Tyr Ala Ile Lys Ile Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys
 35 40 45
 Val Pro Tyr Val Thr Arg Glu Arg Asp Val Met Ser Arg Leu
 50 55 60

<210> 191
 <211> 90
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 191
 His Pro Phe Val Thr Gln Leu Tyr Thr His Phe His Asp Gln Ala Arg
 1 5 10 15
 Ile Tyr Phe Val Ile Gly Leu Val Glu Asn Gly Asp Leu Gly Glu Ser
 20 25 30
 Leu Cys His Phe Gly Ser Phe Asp Met Leu Thr Ser Lys Phe Phe Ala
 35 40 45

Ser Glu Ile Leu Thr Gly Leu Gln Phe Leu His Asp Asn Lys Ile Val
50 55 60
His Arg Asp Met Lys Pro Asp Asn Val Leu Ile Gln Lys Asp Gly His
65 70 75 80
Ile Leu Ile Thr Asp Phe Gly Ser Ala Gln
85 90

<210> 192
<211> 39
<212> PRT
<213> *Caenorhabditis elegans*

<400> 192
His Pro Phe Leu Tyr Phe Asp Tyr Phe Asn Gly Leu Gly Ser Phe Asp
1 5 10 15
Phe Glu Ile Leu Leu His Ile His Arg Asp Lys Pro Asn Leu Asp His
20 25 30
Ile Ile Thr Asp Phe Gly Ala
35

<210> 193
<211> 90
<212> PRT
<213> *Homo sapiens*

<400> 193
His Pro Phe Phe Val Lys Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys
1 5 10 15
Leu Tyr Phe Gly Leu Ser Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr
20 25 30
Ile Arg Lys Ile Gly Ser Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr
35 40 45
Ala Glu Ile Val Ser Ala Leu Glu Tyr Leu His Gly Lys Gly Ile Ile
50 55 60
His Arg Asp Leu Lys Pro Glu Asn Ile Leu Leu Asn Glu Asp Met His
65 70 75 80
Ile Gln Ile Thr Asp Phe Gly Thr Ala Lys
85 90

<210> 194
<211> 98
<212> PRT
<213> *Caenorhabditis elegans*

<400> 194
Glu Glu Asn Thr Ala Arg Arg Thr Thr Phe Val Gly Thr Ala Leu Tyr
1 5 10 15
Val Ser Pro Glu Met Leu Ala Asp Gly Asp Val Gly Pro Gln Thr Asp
20 25 30
Ile Trp Gly Leu Gly Cys Ile Leu Phe Gln Cys Leu Ala Gly Gln Pro
35 40 45
Pro Phe Arg Ala Val Asn Gln Tyr His Leu Leu Lys Arg Ile Gln Glu
50 55 60
Leu Asp Phe Ser Phe Pro Glu Gly Phe Pro Glu Glu Ala Ser Glu Ile
65 70 75 80
Ile Ala Lys Ile Leu Val Arg Asp Pro Ser Thr Arg Ile Thr Ser Gln

<400> 198
 Leu Ala His Phe Phe Glu Val Trp Asn Pro Pro Leu Ala Tyr Pro Ala
 1 5 10 15
 Glu

<210> 199
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 199
 Leu Lys Ala His Pro Phe Phe Glu Ser Val Thr Trp Glu Asn Leu His
 1 5 10 15
 Gln Gln Thr Pro Pro Lys Leu Thr Ala Tyr Leu Pro Ala Met Ser Glu
 20 25 30
 Asp Asp Glu
 35

<210> 200
 <211> 104
 <212> PRT
 <213> Caenorhabditis elegans

<400> 200
 Leu Glu Glu Gln Arg Val Lys Asn Pro Phe His Ile Phe Thr Asn Asn
 1 5 10 15
 Ser Leu Ile Leu Lys Gln Gly Tyr Leu Glu Lys Lys Arg Gly Leu Phe
 20 25 30
 Ala Arg Arg Arg Met Phe Leu Leu Thr Glu Gly Pro His Leu Leu Tyr
 35 40 45
 Ile Asp Val Pro Asn Leu Val Leu Lys Gly Glu Val Pro Trp Thr Pro
 50 55 60
 Cys Met Gln Val Glu Leu Lys Asn Ser Gly Thr Phe Phe Ile His Thr
 65 70 75 80
 Pro Asn Arg Val Tyr Tyr Leu Phe Asp Leu Glu Lys Lys Ala Asp Glu
 85 90 95
 Trp Cys Lys Ala Ile Asn Asp Val
 100

<210> 201
 <211> 59
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

<400> 201
 Leu Glu Gln Asn Pro His Phe Asn Leu Ile Leu Lys Gly Lys Gly Leu
 1 5 10 15
 Phe Ala Arg Arg Arg Leu Leu Thr Glu Gly Pro His Leu Tyr Asp Asn
 20 25 30
 Val Leu Lys Gly Glu Pro Trp Glu Lys Asn Thr Phe Phe His Thr Pro
 35 40 45
 Asn Arg Tyr Tyr Leu Asp Ala Trp Cys Ile Val
 50 55

<210> 202
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 202
 Leu Glu Lys Gln Ala Gly Gly Asn Pro Trp His Gln Phe Val Glu Asn
 1 5 10 15
 Asn Leu Ile Leu Lys Met Gly Pro Val Asp Lys Arg Lys Gly Leu Phe
 20 25 30
 Ala Arg Arg Arg Gln Leu Leu Leu Thr Glu Gly Pro His Leu Tyr Tyr
 35 40 45
 Val Asp Pro Val Asn Lys Val Leu Lys Gly Glu Ile Pro Trp Ser Gln
 50 55 60
 Glu Leu Arg Pro Glu Ala Lys Asn Phe Lys Thr Phe Phe Val His Thr
 65 70 75 80
 Pro Asn Arg Thr Tyr Tyr Leu Met Asp Pro Ser Gly Asn Ala His Lys
 85 90 95
 Trp Cys Arg Lys Ile Gln Glu Val
 100

<210> 203
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 203
 Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile Lys Ile Thr
 1 5 10 15
 Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala Thr Met Lys
 20 25 30
 Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val
 35 40 45

<210> 204
 <211> 36
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 204
 Lys Leu Glu Asn Leu Leu Asp Lys Asp Gly His Ile Lys Ile Asp Phe
 1 5 10 15
 Gly Leu Cys Lys Glu Ile Gly Thr Phe Cys Gly Thr Pro Glu Tyr Leu
 20 25 30
 Ala Pro Glu Val
 35

<210> 205
 <211> 45
 <212> PRT
 <213> Caenorhabditis elegans

<400> 205
 Lys Leu Glu Asn Leu Leu Leu Asp Lys Asp Gly His Ile Lys Ile Ala
 1 5 10 15
 Asp Phe Gly Leu Cys Lys Glu Glu Ile Ser Phe Gly Asp Lys Thr Ser

			20					25					30
Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	
		35					40					45	

<210> 206
 <211> 62
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 206

Leu	Cys	Lys	Glu	Glu	Ile	Lys	Tyr	Gly	Asp	Lys	Thr	Ser	Thr	Phe	Cys
1				5					10					15	
Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Ile	Glu	Asp	Ile	Asp	Tyr
		20						25					30		
Asp	Arg	Ser	Val	Asp	Trp	Trp	Gly	Val	Gly	Val	Val	Met	Tyr	Glu	Met
		35					40					45			
Met	Cys	Gly	Arg	Leu	Pro	Phe	Ser	Ala	Lys	Glu	Asn	Gly	Lys		
	50					55					60				

<210> 207
 <211> 43
 <212> PRT
 <213> *Caenorhabditis elegans* or *Mus musculus*

<400> 207

Leu	Cys	Lys	Glu	Ile	Gly	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala
1				5					10					15	
Pro	Glu	Val	Glu	Asp	Asp	Tyr	Arg	Val	Asp	Trp	Trp	Gly	Gly	Val	Val
		20						25					30		
Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe					
	35						40								

<210> 208
 <211> 492
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 208

Met	Gly	Val	Asn	Asp	His	Asp	Val	Ser	Val	Pro	Leu	Gln	Glu	Val	Gln
1				5					10					15	
Ser	Arg	Thr	Val	Glu	Gly	Lys	Leu	Thr	Lys	Cys	Leu	Ala	Phe	Ser	Ala
		20						25					30		
Phe	Val	Ile	Thr	Leu	Ala	Ser	Phe	Gln	Phe	Gly	Tyr	His	Ile	Gly	Cys
	35						40					45			
Val	Asn	Ala	Pro	Gly	Gly	Leu	Ile	Thr	Glu	Trp	Ile	Ile	Gly	Ser	His
	50					55					60				
Lys	Asp	Leu	Phe	Asp	Lys	Glu	Leu	Ser	Arg	Glu	Asn	Ala	Asp	Leu	Ala
65					70				75					80	
Trp	Ser	Val	Ala	Val	Ser	Val	Phe	Ala	Val	Gly	Gly	Met	Ile	Gly	Gly
		85						90					95		
Leu	Ser	Ser	Gly	Trp	Leu	Ala	Asp	Lys	Val	Gly	Arg	Arg	Gly	Ala	Leu
		100					105						110		
Phe	Tyr	Asn	Leu	Leu	Ala	Leu	Ala	Ala	Ala	Ala	Leu	Met	Gly	Leu	
	115					120					125				
Ala	Lys	Ser	Val	Gly	Ala	Tyr	Pro	Met	Val	Ile	Leu	Gly	Arg	Leu	Ile
	130					135					140				

Ile	Gly	Leu	Asn	Cys	Gly	Phe	Ser	Ser	Ala	Leu	Val	Pro	Met	Phe	Leu
145					150					155					160
Thr	Glu	Ile	Ser	Pro	Asn	Asn	Leu	Arg	Gly	Met	Leu	Gly	Ser	Leu	His
				165					170						175
Gln	Leu	Leu	Val	Thr	Ile	Ala	Ile	Leu	Val	Ser	Gln	Ile	Phe	Gly	Leu
			180					185					190		
Pro	His	Leu	Leu	Gly	Thr	Gly	Asp	Arg	Trp	Pro	Leu	Ile	Phe	Ala	Phe
		195					200					205			
Thr	Val	Val	Pro	Ala	Val	Leu	Gln	Leu	Ala	Leu	Leu	Met	Leu	Cys	Pro
	210					215					220				
Glu	Ser	Pro	Lys	Tyr	Thr	Met	Ala	Val	Arg	Gly	Gln	Arg	Asn	Glu	Ala
225					230					235					240
Glu	Ser	Ala	Leu	Lys	Lys	Leu	Arg	Asp	Thr	Glu	Asp	Val	Ser	Thr	Glu
				245					250					255	
Ile	Glu	Ala	Met	Gln	Glu	Glu	Ala	Thr	Ala	Ala	Gly	Val	Gln	Glu	Lys
			260					265					270		
Pro	Lys	Met	Gly	Asp	Met	Phe	Lys	Gly	Ala	Leu	Leu	Trp	Pro	Met	Ser
		275					280					285			
Ile	Ala	Ile	Met	Met	Met	Leu	Ala	Gln	Gln	Leu	Ser	Gly	Ile	Asn	Val
	290					295					300				
Ala	Met	Phe	Tyr	Ser	Thr	Val	Ile	Phe	Arg	Gly	Ala	Gly	Leu	Thr	Gly
305					310					315					320
Asn	Glu	Pro	Phe	Tyr	Ala	Thr	Ile	Gly	Met	Gly	Ala	Val	Asn	Val	Ile
				325					330					335	
Met	Thr	Leu	Ile	Ser	Val	Trp	Leu	Val	Asp	His	Pro	Lys	Phe	Gly	Arg
			340				345						350		
Arg	Ser	Leu	Leu	Leu	Ala	Gly	Leu	Thr	Gly	Met	Phe	Val	Ser	Thr	Leu
		355					360					365			
Leu	Leu	Val	Gly	Ala	Leu	Thr	Ile	Gln	Asn	Ser	Gly	Gly	Asp	Lys	Trp
	370					375					380				
Ala	Ser	Tyr	Ser	Ala	Ile	Gly	Phe	Val	Leu	Leu	Phe	Val	Ile	Ser	Phe
385					390					395					400
Ala	Thr	Gly	Pro	Gly	Ala	Ile	Pro	Trp	Phe	Phe	Val	Ser	Glu	Ile	Phe
				405					410					415	
Asp	Ser	Ser	Ala	Arg	Gly	Asn	Ala	Asn	Ser	Ile	Ala	Val	Met	Val	Asn
			420					425					430		
Trp	Ala	Ala	Asn	Leu	Leu	Val	Gly	Leu	Thr	Phe	Leu	Pro	Ile	Asn	Asn
		435					440					445			
Leu	Met	Gln	Gln	Tyr	Ser	Phe	Phe	Ile	Phe	Ser	Gly	Phe	Leu	Ala	Phe
	450					455					460				
Phe	Ile	Phe	Tyr	Thr	Trp	Lys	Phe	Val	Pro	Glu	Thr	Lys	Gly	Lys	Ser
465					470					475					480
Ile	Glu	Gln	Ile	Gln	Ala	Glu	Phe	Glu	Lys	Arg	Lys				
				485					490						

<210> 209

<211> 22

<212> PRT

<213> Caenorhabditis elegans

<400> 209

Arg	Asn	Glu	Ala	Glu	Ser	Ala	Leu	Lys	Lys	Leu	Arg	Asp	Thr	Glu	Asp
1				5					10					15	
Val	Ser	Thr	Glu	Ile	Glu										
			20												

<210> 210

<211> 28
 <212> DNA
 <213> Caenorhabditis elegans

<400> 210
 tctcgttggtt tgccgctcgga tgtctgcc

28

<210> 211
 <211> 223
 <212> PRT
 <213> Ascoris suum

<400> 211
 Ala Lys Asn Asn Gly Glu Phe Val Arg Cys Val His Ser Val Gly Gln
 1 5 10 15
 Pro Lys Pro Val Ala Thr Lys Val Ile Asn His Trp Pro Cys Asn Pro
 20 25 30
 Glu Lys Thr Ile Ile Ala His Arg Pro Ala Glu Arg Glu Ile Trp Ser
 35 40 45
 Phe Gly Ser Gly Tyr Gly Gly Asn Ser Leu Leu Gly Lys Lys Cys Phe
 50 55 60
 Ala Leu Arg Ile Ala Met Asn Ile Gly Tyr Asp Glu Gly Trp Met Ala
 65 70 75 80
 Glu His Met Leu Ile Met Gly Val Thr Ser Pro Lys Gly Glu Glu Arg
 85 90 95
 Phe Val Ala Ala Ala Phe Pro Ser Ala Cys Gly Lys Thr Asn Leu Ala
 100 105 110
 Met Leu Glu Pro Thr Ile Pro Gly Trp Lys Val Arg Val Ile Gly Asp
 115 120 125
 Asp Ile Ala Trp Met Lys Phe Gly Ala Asp Gly Arg Leu Tyr Ala Ile
 130 135 140
 Asn Pro Glu Tyr Gly Phe Phe Gly Val Ala Pro Gly Thr Ser His Lys
 145 150 155 160
 Thr Asn Pro Met Ala Met Ala Ser Phe Gln Glu Asn Thr Ile Phe Thr
 165 170 175
 Asn Val Ala Glu Thr Ala Asp Gly Glu Tyr Phe Trp Glu Gly Leu Glu
 180 185 190
 His Glu Val Lys Asn Pro Lys Val Asp Met Ile Asn Trp Leu Gly Glu
 195 200 205
 Pro Trp His Ile Gly Asp Glu Ser Lys Ala Ala His Pro Asn Ser
 210 215 220

<210> 212
 <211> 176
 <212> PRT
 <213> Caenorhabditis elegans or Ascoris suum

<400> 212
 Ala Asn Phe Val Arg Cys His Ser Val Gly Pro Pro Val Val Ile Asn
 1 5 10 15
 His Trp Pro Cys Asn Pro Glu Ile Ala His Arg Pro Glu Arg Glu Ile
 20 25 30
 Trp Ser Phe Gly Ser Gly Tyr Gly Asn Ser Leu Leu Gly Lys Lys
 35 40 45
 Cys Phe Ala Leu Arg Ile Ala Asn Ile Asp Glu Gly Trp Met Ala Glu
 50 55 60
 His Met Leu Ile Met Gly Val Thr Pro Gly Glu Phe Ala Ala Ala Phe
 65 70 75 80

Pro	Ser	Ala	Cys	Gly	Lys	Thr	Asn	Leu	Ala	Met	Leu	Glu	Pro	Thr	Pro
				85					90					95	
Gly	Trp	Lys	Val	Arg	Gly	Asp	Asp	Ile	Ala	Trp	Met	Lys	Phe	Gly	Asp
		100						105					110		
Gly	Arg	Leu	Tyr	Ala	Ile	Asn	Pro	Glu	Gly	Phe	Phe	Gly	Val	Ala	Pro
		115					120					125			
Gly	Thr	Ser	Lys	Thr	Asn	Pro	Met	Ala	Ala	Phe	Gln	Asn	Ile	Phe	Thr
	130					135					140				
Asn	Val	Ala	Glu	Thr	Ala	Gly	Glu	Tyr	Phe	Trp	Glu	Gly	Leu	Glu	Glu
145					150					155					160
Val	Asp	Trp	Leu	Gly	Glu	Trp	His	Ile	Gly	Ala	Ala	His	Pro	Asn	Ser
			165						170					175	

<210> 213
 <211> 223
 <212> PRT
 <213> Caenorhabditis elegans

<400> 213

Ala	Leu	Gly	Asn	Gln	Asp	Phe	Val	Arg	Cys	Ile	His	Ser	Val	Gly	Leu
1				5					10					15	
Pro	Arg	Pro	Val	Lys	Gln	Arg	Val	Ile	Asn	His	Trp	Pro	Cys	Asn	Pro
			20					25					30		
Glu	Arg	Val	Leu	Ile	Ala	His	Arg	Pro	Pro	Glu	Arg	Glu	Ile	Trp	Ser
		35					40					45			
Phe	Gly	Ser	Gly	Tyr	Gly	Gly	Asn	Ser	Leu	Leu	Gly	Lys	Lys	Cys	Phe
	50					55					60				
Ala	Leu	Arg	Ile	Ala	Ser	Asn	Ile	Ala	Lys	Asp	Glu	Gly	Trp	Met	Ala
65					70					75					80
Glu	His	Met	Leu	Ile	Met	Gly	Val	Thr	Arg	Pro	Cys	Gly	Arg	Glu	His
				85					90					95	
Phe	Ile	Ala	Ala	Ala	Phe	Pro	Ser	Ala	Cys	Gly	Lys	Thr	Asn	Leu	Ala
			100					105					110		
Met	Leu	Glu	Pro	Thr	Leu	Pro	Gly	Trp	Lys	Val	Arg	Cys	Val	Gly	Asp
		115					120					125			
Asp	Ile	Ala	Trp	Met	Lys	Phe	Gly	Glu	Asp	Gly	Arg	Leu	Tyr	Ala	Ile
	130					135					140				
Asn	Pro	Glu	Ala	Gly	Phe	Phe	Gly	Val	Ala	Pro	Gly	Thr	Ser	Asn	Lys
145					150					155					160
Thr	Asn	Pro	Met	Ala	Val	Ala	Thr	Phe	Gln	Lys	Asn	Ser	Ile	Phe	Thr
				165					170					175	
Asn	Val	Ala	Glu	Thr	Ala	Asn	Gly	Glu	Tyr	Phe	Trp	Glu	Gly	Leu	Glu
			180					185					190		
Asp	Glu	Ile	Ala	Asp	Lys	Asn	Val	Asp	Ile	Thr	Thr	Trp	Leu	Gly	Glu
		195					200					205			
Lys	Trp	His	Ile	Gly	Glu	Pro	Gly	Val	Ala	Ala	His	Pro	Asn	Ser	
		210					215					220			

<210> 214
 <211> 173
 <212> PRT
 <213> Ascoris suum

<400> 214

Lys	Gly	Asp	Phe	Val	Ser	Leu	Pro	Lys	His	Val	Gln	Arg	Phe	Val	Ala
1				5					10					15	
Glu	Lys	Ala	Glu	Leu	Met	Lys	Pro	Ser	Ala	Ile	Phe	Ile	Cys	Asp	Gly

			20					25					30			
Ser	Gln	Asn	Glu	Ala	Asp	Glu	Leu	Ile	Ala	Arg	Cys	Val	Glu	Arg	Gly	
		35					40					45				
Val	Leu	Val	Pro	Leu	Lys	Ala	Tyr	Lys	Asn	Asn	Tyr	Leu	Cys	Arg	Thr	
	50					55					60					
Asp	Pro	Arg	Asp	Val	Ala	Arg	Val	Glu	Ser	Lys	Thr	Trp	Met	Ile	Thr	
65					70					75					80	
Pro	Glu	Lys	Tyr	Asp	Ser	Val	Cys	His	Thr	Pro	Glu	Gly	Val	Lys	Pro	
				85					90					95		
Met	Met	Gly	Gln	Trp	Met	Ser	Pro	Asp	Glu	Phe	Gly	Lys	Glu	Leu	Asp	
			100					105					110			
Asp	Arg	Phe	Pro	Gly	Cys	Met	Ala	Gly	Arg	Thr	Met	Tyr	Val	Ile	Pro	
	115						120					125				
Tyr	Ser	Met	Gly	Pro	Val	Gly	Gly	Pro	Leu	Ser	Lys	Ile	Gly	Ile	Glu	
	130					135					140					
Leu	Thr	Asp	Ser	Asp	Tyr	Val	Val	Leu	Cys	Met	Arg	Ile	Met	Thr	Arg	
145					150					155					160	
Met	Gly	Glu	Pro	Val	Leu	Lys	Ala	Leu	Ala	Lys	Asn	Asn				
				165				170								

<210> 215
 <211> 120
 <212> PRT
 <213> Caenorhabditis elegans or Ascoris suum

<400> 215																
Gly	Asp	Phe	Leu	Pro	Val	Gln	Arg	Phe	Ala	Glu	Lys	Ala	Glu	Leu	Met	
1				5					10					15		
Pro	Ile	Phe	Ile	Cys	Asp	Gly	Ser	Gln	Glu	Ala	Asp	Glu	Leu	Ile	Glu	
			20					25					30			
Arg	Gly	Leu	Leu	Ala	Tyr	Asn	Asn	Tyr	Cys	Arg	Thr	Asp	Pro	Asp	Val	
	35					40						45				
Ala	Arg	Val	Glu	Ser	Lys	Thr	Trp	Met	Thr	Lys	Tyr	Asp	Val	His	Thr	
	50					55					60					
Glu	Gly	Val	Pro	Met	Gly	Trp	Pro	Glu	Leu	Asp	Arg	Phe	Pro	Gly	Cys	
65					70					75					80	
Met	Ala	Gly	Arg	Met	Tyr	Val	Ile	Pro	Ser	Met	Gly	Pro	Val	Gly	Gly	
				85					90					95		
Pro	Leu	Ser	Lys	Ile	Gly	Ile	Leu	Thr	Asp	Ser	Tyr	Val	Val	Leu	Met	
			100					105					110			
Arg	Ile	Met	Thr	Arg	Val	Ala	Leu									
		115					120									

<210> 216
 <211> 173
 <212> PRT
 <213> Caenorhabditis elegans

<400> 216																
Gln	Gly	Asp	Phe	His	Leu	Leu	Pro	Ala	Lys	Val	Gln	Arg	Phe	Ile	Ala	
1				5					10					15		
Glu	Lys	Ala	Glu	Leu	Met	Arg	Pro	Arg	Gly	Ile	Phe	Ile	Cys	Asp	Gly	
			20					25					30			
Ser	Gln	His	Glu	Ala	Asp	Glu	Leu	Ile	Asp	Lys	Leu	Ile	Glu	Arg	Gly	
	35						40					45				
Met	Leu	Ser	Lys	Leu	Glu	Ala	Tyr	Glu	Asn	Asn	Tyr	Ile	Cys	Arg	Thr	
	50					55					60					

Asp	Pro	Lys	Asp	Val	Ala	Arg	Val	Glu	Ser	Lys	Thr	Trp	Met	Val	Thr
65					70					75					80
Lys	Asn	Lys	Tyr	Asp	Thr	Val	Thr	His	Thr	Lys	Glu	Gly	Val	Glu	Pro
				85					90					95	
Ile	Met	Gly	His	Trp	Leu	Ala	Pro	Glu	Asp	Leu	Ala	Thr	Glu	Leu	Asp
			100					105					110		
Ser	Arg	Phe	Pro	Gly	Cys	Met	Ala	Gly	Arg	Ile	Met	Tyr	Val	Ile	Pro
		115					120					125			
Phe	Ser	Met	Gly	Pro	Val	Gly	Gly	Pro	Leu	Ser	Lys	Ile	Gly	Ile	Gln
	130					135					140				
Leu	Thr	Asp	Ser	Asn	Tyr	Val	Val	Leu	Ser	Met	Arg	Ile	Met	Thr	Arg
145					150					155					160
Val	Asn	Asn	Asp	Val	Trp	Asp	Ala	Leu	Gly	Asn	Gln	Asp			
				165					170						

<210> 217
 <211> 107
 <212> PRT
 <213> Ascoris suum

<400> 217

Arg	Phe	Thr	Ala	Pro	Ala	Gly	Gln	Cys	Pro	Ile	Ile	His	Pro	Asp	Trp
1				5					10					15	
Glu	Lys	Pro	Glu	Gly	Val	Pro	Ile	Asp	Ala	Ile	Ile	Phe	Gly	Gly	Arg
			20					25					30		
Arg	Pro	Glu	Gly	Val	Pro	Leu	Val	Phe	Glu	Ser	Arg	Ser	Trp	Val	His
		35				40					45				
Gly	Ile	Phe	Val	Gly	Ala	Cys	Val	Lys	Ser	Glu	Ala	Thr	Ala	Ala	Ala
	50					55					60				
Glu	His	Thr	Gly	Lys	Gln	Val	Met	His	Asp	Pro	Met	Ala	Met	Arg	Pro
65					70				75						80
Phe	Met	Gly	Tyr	Asn	Phe	Gly	Arg	Tyr	Met	Arg	His	Trp	Met	Lys	Leu
				85				90						95	
Gly	Gln	Pro	Pro	His	Lys	Val	Pro	Lys	Ile	Phe					
			100					105							

<210> 218
 <211> 77
 <212> PRT
 <213> Caenorhabditis elegans or Ascoris suum

<400> 218

Arg	Phe	Ala	Pro	Ala	Gln	Cys	Pro	Ile	Ile	His	Pro	Asp	Trp	Glu	Pro
1				5					10					15	
Gly	Val	Pro	Ile	Ala	Ile	Ile	Phe	Gly	Gly	Arg	Arg	Pro	Gly	Val	Pro
			20					25					30		
Leu	Glu	Ser	Trp	His	Gly	Phe	Gly	Cys	Lys	Ser	Glu	Ala	Thr	Ala	Ala
		35				40					45				
Ala	Glu	Thr	Gly	Lys	Val	Met	His	Asp	Pro	Met	Ala	Met	Arg	Pro	Phe
	50					55					60				
Met	Gly	Tyr	Asn	Phe	Gly	Tyr	His	Trp	Leu	Lys	Val	Phe			
65					70				75						

<210> 219
 <211> 107
 <212> PRT

<213> *Caenorhabditis elegans*

<400> 219

```
Arg Phe Ala Ala Pro Ala Asn Gln Cys Pro Ile Ile His Pro Asp Trp
 1          5          10          15
Glu Ser Pro Gln Gly Val Pro Ile Glu Ala Ile Ile Phe Gly Gly Arg
      20          25          30
Arg Pro Gln Gly Val Pro Leu Ile Tyr Glu Thr Asn Ser Trp Glu His
      35          40          45
Gly Val Phe Thr Gly Ser Cys Leu Lys Ser Glu Ala Thr Ala Ala Ala
      50          55          60
Glu Phe Thr Gly Lys Thr Val Met His Asp Pro Met Ala Met Arg Pro
      65          70          75          80
Phe Met Gly Tyr Asn Phe Gly Lys Tyr Leu Gln His Trp Leu Asp Leu
      85          90          95
Lys Thr Asp Ser Arg Lys Val Ile Asp Phe Phe
      100          105
```

<210> 220

<211> 116

<212> PRT

<213> *Ascoris suum*

<400> 220

```
Val Pro Lys Ile Phe His Val Asn Trp Phe Arg Gln Ser Ala Asp His
 1          5          10          15
Lys Phe Leu Trp Pro Gly Tyr Gly Asp Asn Ile Arg Val Ile Asp Trp
      20          25          30
Ile Leu Arg Arg Cys Ser Gly Asp Ala Thr Ile Ala Glu Glu Thr Pro
      35          40          45
Ile Gly Phe Ile Pro Lys Lys Gly Thr Ile Asn Leu Glu Gly Leu Pro
      50          55          60
Asn Val Asn Trp Asp Glu Leu Met Ser Ile Pro Lys Ser Tyr Trp Leu
      65          70          75          80
Glu Asp Met Val Glu Thr Lys Thr Phe Phe Glu Asn Gln Val Gly Ser
      85          90          95
Asp Leu Pro Pro Glu Ile Ala Lys Glu Leu Glu Ala Gln Thr Glu Arg
      100          105          110
Ile Lys Ala Leu
      115
```

<210> 221

<211> 68

<212> PRT

<213> *Caenorhabditis elegans* or *Ascoris suum*

<400> 221

```
Pro Lys Ile His Val Asn Trp Phe Arg Lys Phe Leu Trp Pro Gly Gly
 1          5          10          15
Asp Asn Ile Arg Val Ile Asp Trp Ile Arg Arg Gly Ile Glu Thr Pro
      20          25          30
Ile Gly Pro Lys Gly Ile Asn Leu Glu Gly Leu Val Asn Trp Asp Glu
      35          40          45
Leu Met Ser Pro Tyr Trp Asp Glu Phe Gln Val Gly Asp Leu Pro Glu
      50          55          60
Ala Gln Arg Leu
      65
```

<210> 222
 <211> 116
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 222
 Met Pro Lys Ile Tyr His Val Asn Trp Phe Arg Lys Asp Ser Asn Asn
 1 5 10 15
 Lys Phe Leu Trp Pro Gly Phe Gly Asp Asn Ile Arg Val Ile Asp Trp
 20 25 30
 Ile Ile Arg Arg Leu Asp Gly Glu Gln Glu Ile Gly Val Glu Thr Pro
 35 40 45
 Ile Gly Thr Val Pro Ala Lys Gly Ser Ile Asn Leu Glu Gly Leu Gly
 50 55 60
 Glu Val Asn Trp Asp Glu Leu Met Ser Val Pro Ala Asp Tyr Trp Lys
 65 70 75 80
 Gln Asp Ala Gln Glu Ile Arg Lys Phe Leu Asp Glu Gln Val Gly Glu
 85 90 95
 Asp Leu Pro Glu Pro Val Arg Ala Glu Met Asp Ala Gln Glu Lys Arg
 100 105 110
 Val Gln Thr Leu
 115

<210> 223
 <211> 36
 <212> PRT
 <213> *Ascoris suum*

<400> 223
 Ser Leu Ser His Phe Lys Asp Asp Asp Phe Ala Val Val Ser Glu Val
 1 5 10 15
 Val Thr His Lys Gln Asn His Ile Pro Val Ile Lys Gly Asp Phe Val
 20 25 30
 Ser Leu Pro Lys
 35

<210> 224
 <211> 15
 <212> PRT
 <213> *Caenorhabditis elegans* or *Ascoris suum*

<400> 224
 Ser Leu Asp Phe Val Val Glu Val Val His Pro Lys Phe Ser Lys
 1 5 10 15

<210> 225
 <211> 36
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 225
 Ser Leu Arg Gln Ile Ser Glu Asp Ala Phe Tyr Val Val Asn Glu Val
 1 5 10 15
 Val Met Lys Arg Leu Gly His Val Pro Ile Leu Lys Val Ile Phe Glu
 20 25 30

Ser Ser Glu Lys
35

<210> 226
<211> 25
<212> PRT
<213> Ascoris suum

<400> 226
Gly Cys Met Ala Gly Arg Thr Met Tyr Val Ile Pro Tyr Ser Met Gly
1 5 10 15
Pro Val Gly Gly Pro Leu Ser Lys Ile
20 25

<210> 227
<211> 9
<212> PRT
<213> Caenorhabditis elegans or Ascoris suum

<400> 227
Gly Cys Arg Val Pro Ser Pro Leu Lys
1 5

<210> 228
<211> 25
<212> PRT
<213> Caenorhabditis elegans

<400> 228
Gly Cys Ser Gly Arg Arg Val Leu Cys Val Cys Pro Cys Ser His Ser
1 5 10 15
Ser Ser Ala Leu Pro Leu Gln Lys Val
20 25

<210> 229
<211> 16
<212> PRT
<213> Ascoris suum

<400> 229
Leu Pro Asn Val Asn Trp Asp Glu Leu Met Ser Ile Pro Lys Ser Tyr
1 5 10 15

<210> 230
<211> 7
<212> PRT
<213> Caenorhabditis elegans or Ascoris suum

<400> 230
Leu Asn Trp Ser Pro Ser Tyr
1 5

<210> 231

<211> 16
 <212> PRT
 <213> Caenorhabditis elegans

<400> 231
 Leu Glu Ser Phe Asn Trp Phe Ser Phe Val Ser Cys Pro Asp Ser Tyr
 1 5 10 15

<210> 232
 <211> 14
 <212> PRT
 <213> Ascoris suum

<400> 232
 Ser Val Cys His Thr Pro Glu Gly Val Lys Pro Met Met Gly
 1 5 10

<210> 233
 <211> 6
 <212> PRT
 <213> Caenorhabditis elegans or Ascoris suum

<400> 233
 Val His Pro Pro Met Gly
 1 5

<210> 234
 <211> 14
 <212> PRT
 <213> Caenorhabditis elegans

<400> 234
 Thr Val Met His Asp Pro Met Ala Met Arg Pro Phe Met Gly
 1 5 10

<210> 235
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 235
 Ser Gly Phe Phe Asp Tyr Gly Ser Phe Ser Glu Ile Met Gln Pro Trp
 1 5 10 15
 Ala Gln Thr Val Val Val Gly Arg Ala Arg Leu Gly Gly Ile Pro Val
 20 25 30
 Gly Val Val Ala Val Glu Thr Arg Thr Val Glu Leu Ser Val Pro Ala
 35 40 45
 Asp Pro Ala Asn Leu Asp Ser Glu Ala Lys Ile Ile Gln Gln Ala Gly
 50 55 60
 Gln Val Trp Phe Pro Asp Ser Ala Phe Lys Thr Tyr Gln Ala Ile Lys
 65 70 75 80
 Asp Phe Asn Arg Glu Gly Leu Pro Leu Met Val Phe Ala Asn Trp Arg
 85 90 95
 Gly Phe Ser Gly Gly Met Lys Asp Met Tyr Asp Gln Val Leu Lys Phe
 100 105 110

Gly	Ala	Tyr	Ile	Val	Asp	Gly	Leu	Arg	Glu	Cys	Ser	Gln	Pro	Val	Met
	115						120					125			
Val	Tyr	Ile	Pro	Pro	Gln	Ala	Glu	Leu	Arg	Gly	Gly	Ser	Trp	Val	Val
	130					135					140				
Ile	Asp	Pro	Thr	Ile	Asn	Pro	Arg	His	Met	Glu	Met	Tyr	Ala	Asp	Arg
145					150					155					160
Glu	Ser	Arg	Gly	Ser	Val	Leu	Glu	Pro	Glu	Gly	Thr	Val	Glu	Ile	Lys
				165					170					175	
Phe	Arg	Lys	Lys	Asp	Leu	Val	Lys	Thr	Met	Arg	Arg	Val	Asp	Pro	Val
			180					185					190		
Tyr	Ile	Arg	Leu	Ala											
			195												

<210> 236
 <211> 109
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

Gly	Asp	Ser	Phe	Glu	Ile	Trp	Ala	Val	Gly	Arg	Ala	Arg	Leu	Gly	Ile
1				5					10					15	
Pro	Gly	Val	Val	Glu	Arg	Val	Pro	Ala	Asp	Pro	Ala	Ser	Gln	Ala	Gly
			20					25					30		
Gln	Val	Trp	Pro	Asp	Ser	Ala	Phe	Lys	Thr	Ala	Ile	Asp	Asn	Glu	Leu
		35					40					45			
Pro	Leu	Met	Ala	Arg	Gly	Phe	Ser	Gly	Gly	Lys	Asp	Met	Tyr	Asp	Val
	50					55					60				
Leu	Lys	Phe	Gly	Ala	Ile	Val	Asp	Leu	Pro	Val	Val	Tyr	Ile	Pro	Glu
65					70					75					80
Leu	Arg	Gly	Gly	Trp	Val	Asp	Ile	Pro	Ala	Asp	Ser	Arg	Gly	Leu	Glu
				85					90					95	
Pro	Val	Ile	Lys	Phe	Arg	Lys	Met	Arg	Asp	Pro	Tyr	Leu			
			100					105							

<210> 237
 <211> 197
 <212> PRT
 <213> Caenorhabditis elegans

Thr	Gly	Ile	Cys	Asp	Thr	Met	Ser	Phe	Asp	Glu	Ile	Cys	Gly	Asp	Trp
1				5					10					15	
Ala	Lys	Ser	Ile	Val	Ala	Gly	Arg	Ala	Arg	Leu	Cys	Gly	Ile	Pro	Ile
			20					25					30		
Gly	Val	Val	Ser	Ser	Glu	Phe	Arg	Asn	Phe	Ser	Thr	Ile	Val	Pro	Ala
		35					40					45			
Asp	Pro	Ala	Ile	Asp	Gly	Ser	Gln	Val	Gln	Asn	Thr	Gln	Arg	Ala	Gly
	50					55					60				
Gln	Val	Trp	Tyr	Pro	Asp	Ser	Ala	Phe	Lys	Thr	Ala	Glu	Ala	Ile	Asn
65					70					75					80
Asp	Leu	Asn	Lys	Glu	Asn	Leu	Pro	Leu	Met	Ile	Ile	Ala	Ser	Leu	Arg
			85						90					95	
Gly	Phe	Ser	Gly	Gln	Lys	Asp	Met	Tyr	Asp	Met	Val	Leu	Lys	Phe	
			100				105					110			
Gly	Ala	Gln	Ile	Val	Asp	Ala	Leu	Ala	Val	Tyr	Asn	Arg	Pro	Val	Ile
		115					120					125			
Val	Tyr	Ile	Pro	Glu	Ala	Gly	Glu	Leu	Arg	Gly	Gly	Ala	Trp	Ala	Val

130		135		140
Leu Asp Ser Lys Ile Arg	Pro Glu Phe Ile His	Leu Val Ala Asp Glu		
145		150		160
Lys Ser Arg Gly Gly Ile	Leu Glu Pro Asn Ala	Val Val Gly Ile Lys		
		165		175
Phe Arg Lys Pro Met Met	Met Glu Met Met Lys	Arg Ser Asp Pro Thr		
		180		190
Tyr Ser Lys Leu Ser				
195				

<210> 238
 <211> 124
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(124)
 <223> Xaa = Any Amino Acid

<400> 238
Val Gly Tyr Pro Val Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys
1 5 10 15
Gly Ile Arg Lys Val Asn Asn Ala Asp Asp Phe Pro Asn Leu Phe Arg
20 25 30
Gln Val Gln Ala Glu Val Pro Gly Ser Pro Ile Phe Val Met Arg Leu
35 40 45
Ala Lys Gln Ser Arg His Leu Glu Val Gln Ile Leu Ala Asp Gln Tyr
50 55 60
Gly Asn Ala Ile Ser Leu Phe Gly Arg Asp Cys Ser Val Gln Arg Arg
65 70 75 80
His Gln Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
85 90 95
Val Phe Glu His Met Glu Gln Cys Ala Val Lys Leu Ala Lys Met Val
100 105 110
Gly Tyr Val Ser Ala Gly Thr Val Glu Tyr Leu Tyr
115 120

<210> 239
 <211> 68
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 239
Gly Pro Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys Gly Ile Arg
1 5 10 15
Lys Asp Phe Phe Val Glu Val Gly Ser Pro Ile Phe Met Arg His Glu
20 25 30
Val Gln Leu Ala Asp Tyr Asn Ile Ser Arg Asp Cys Ser Gln Arg Arg
35 40 45
Gln Lys Met Ala Val Leu Ala Lys Val Gly Tyr Ser Ala Gly Thr Val
50 55 60
Glu Tyr Leu Tyr
65

<210> 240

<211> 124
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 240
 Ile Gly Phe Pro Leu Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys
 1 5 10 15
 Gly Ile Arg Lys Cys Thr Lys Val Glu Asp Phe Lys Ser Met Phe Glu
 20 25 30
 Glu Val Ala Gln Glu Val Gln Gly Ser Pro Ile Phe Leu Met Lys Cys
 35 40 45
 Val Asp Gly Ala Arg His Ile Glu Val Gln Leu Leu Ala Asp Arg Tyr
 50 55 60
 Glu Asn Val Ile Ser Val Tyr Thr Arg Asp Cys Ser Ile Gln Arg Arg
 65 70 75 80
 Cys Gln Lys Ile Ile Glu Glu Ala Pro Ala Ile Ile Ala Ser Ser His
 85 90 95
 Ile Arg Lys Ser Met Gln Glu Asp Ala Val Arg Leu Ala Lys Tyr Val
 100 105 110
 Gly Tyr Glu Ser Ala Gly Thr Val Glu Tyr Leu Tyr
 115 120

<210> 241
 <211> 116
 <212> PRT
 <213> Rat

<400> 241
 Lys Glu Glu Gly Leu Gly Ala Glu Asn Leu Arg Gly Ser Gly Met Ile
 1 5 10 15
 Ala Gly Glu Ser Ser Leu Ala Tyr Asp Glu Ile Ile Thr Ile Ser Leu
 20 25 30
 Val Thr Cys Arg Ala Ile Gly Ile Gly Ala Tyr Leu Val Arg Leu Gly
 35 40 45
 Gln Arg Thr Ile Gln Val Glu Asn Ser His Leu Ile Leu Thr Gly Ala
 50 55 60
 Gly Ala Leu Asn Lys Val Leu Gly Arg Glu Val Tyr Thr Ser Asn Asn
 65 70 75 80
 Gln Leu Gly Gly Ile Gln Ile Met His Asn Asn Gly Val Thr His Cys
 85 90 95
 Thr Val Cys Asp Asp Phe Glu Gly Val Phe Thr Val Leu His Trp Leu
 100 105 110
 Ser Tyr Met Pro
 115

<210> 242
 <211> 65
 <212> PRT
 <213> *Caenorhabditis elegans* or Rat

<400> 242
 Lys Glu Gly Glu Asn Leu Gly Ser Gly Ile Ala Gly Glu Ala Tyr Glu
 1 5 10 15
 Thr Val Thr Arg Gly Ile Gly Ala Tyr Arg Leu Arg Gln Ser His Leu
 20 25 30
 Ile Leu Thr Gly Ala Leu Asn Leu Gly Val Tyr Thr Ser Asn Asn Gln
 35 40 45

Leu Gly Gly Met Asn Gly Val Thr His Val Asp Glu Gly Val Trp Ser
 50 55 60
 Pro
 65

<210> 243
 <211> 116
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 243
 Lys Asn Glu Lys Ile Gly Val Glu Asn Leu Gln Gly Ser Gly Leu Ile
 1 5 10 15
 Ala Gly Glu Thr Ala Arg Ala Tyr Ala Glu Val Pro Thr Tyr Cys Tyr
 20 25 30
 Val Thr Gly Arg Ser Val Gly Ile Gly Ala Tyr Thr Ala Arg Leu Ala
 35 40 45
 His Arg Ile Val Gln His Lys Gln Ser His Leu Ile Leu Thr Gly Tyr
 50 55 60
 Glu Ala Leu Asn Thr Leu Leu Gly Lys Lys Val Tyr Thr Ser Asn Asn
 65 70 75 80
 Gln Leu Gly Gly Pro Glu Val Met Phe Arg Asn Gly Val Thr His Ala
 85 90 95
 Val Val Asp Asn Asp Leu Glu Gly Ile Ala Lys Val Ile Arg Trp Met
 100 105 110
 Ser Phe Leu Pro
 115

<210> 244
 <211> 119
 <212> PRT
 <213> *Homo sapiens*

<400> 244
 His Val Ile Ala Ala Arg Ile Thr Ser Glu Asn Pro Asp Glu Gly Phe
 1 5 10 15
 Lys Pro Ser Ser Gly Thr Val Gln Glu Leu Asn Phe Arg Ser Asn Lys
 20 25 30
 Asn Val Trp Gly Tyr Phe Ser Val Ala Ala Ala Gly Gly Leu His Glu
 35 40 45
 Phe Ala Asp Ser Gln Phe Gly His Cys Phe Ser Trp Gly Glu Asn Arg
 50 55 60
 Glu Glu Ala Ile Ser Asn Met Val Val Ala Leu Lys Glu Leu Ser Ile
 65 70 75 80
 Arg Gly Asp Phe Arg Thr Thr Val Glu Tyr Leu Ile Lys Leu Leu Glu
 85 90 95
 Thr Glu Ser Phe Gln Leu Asn Arg Ile Asp Thr Gly Trp Leu Asp Arg
 100 105 110
 Leu Ile Ala Glu Lys Val Gln
 115

<210> 245
 <211> 59
 <212> PRT
 <213> *Caenorhabditis elegans* or *Homo sapiens*

<400> 245
 His Ile Ala Ala Arg Ile Thr Glu Asn Pro Asp Phe Pro Ser Gly Val
 1 5 10 15
 Glu Asn Phe Ser Trp Tyr Phe Ser Val His Phe Ala Asp Ser Gln Phe
 20 25 30
 Gly His Phe Gly Arg Glu Ala Met Leu Lys Ile Arg Phe Thr Val Tyr
 35 40 45
 Leu Leu Phe Asn Thr Trp Leu Asp Ile Ala Lys
 50 55

<210> 246
 <211> 119
 <212> PRT
 <213> Caenorhabditis elegans

<400> 246
 His Ala Ile Ala Ala Arg Ile Thr Cys Glu Asn Pro Asp Asp Ser Phe
 1 5 10 15
 Arg Pro Ser Thr Gly Lys Val Tyr Glu Ile Asn Phe Pro Ser Ser Gln
 20 25 30
 Asp Ala Trp Ala Tyr Phe Ser Val Gly Arg Gly Ser Ser Val His Gln
 35 40 45
 Phe Ala Asp Ser Gln Phe Gly His Ile Phe Thr Arg Gly Thr Ser Arg
 50 55 60
 Thr Glu Ala Met Asn Thr Met Cys Ser Thr Leu Lys His Met Thr Ile
 65 70 75 80
 Arg Ser Ser Phe Pro Thr Gln Val Asn Tyr Leu Val Asp Leu Met His
 85 90 95
 Asp Ala Asp Phe Ile Asn Asn Ala Phe Asn Thr Gln Trp Leu Asp Lys
 100 105 110
 Arg Ile Ala Met Lys Ile Lys
 115

<210> 247
 <211> 90
 <212> PRT
 <213> Rat

<400> 247
 Pro Gly Gly Ala Asn Asn Asn Asn Tyr Ala Asn Val Glu Leu Ile Leu
 1 5 10 15
 Asp Ile Ala Lys Arg Ile Pro Val Gln Ala Val Trp Ala Gly Trp Gly
 20 25 30
 His Ala Ser Glu Asn Pro Lys Leu Pro Glu Leu Leu Lys Asn Gly
 35 40 45
 Ile Ala Phe Met Gly Pro Pro Ser Gln Ala Met Trp Ala Leu Gly Asp
 50 55 60
 Lys Ile Ala Ser Ser Ile Val Ala Gln Thr Ala Gly Ile Pro Thr Leu
 65 70 75 80
 Pro Trp Ser Gly Ser Gly Leu Arg Val Asp
 85 90

<210> 248
 <211> 55
 <212> PRT
 <213> Caenorhabditis elegans or Rat

<400> 248
 Pro Gly Asn Asn Asn Ala Asn Val Ile Leu Ala Val Ala Val Trp Ala
 1 5 10 15
 Gly Trp Gly His Ala Ser Glu Asn Pro Leu Pro Leu Ile Ala Phe Gly
 20 25 30
 Pro Pro Ala Met Leu Gly Asp Lys Ile Ala Ser Ile Ala Gln Thr Gly
 35 40 45
 Pro Thr Trp Ser Gly Ser Gly
 50 55

<210> 249
 <211> 90
 <212> PRT
 <213> Caenorhabditis elegans

<400> 249
 Pro Ser Gly Thr Asn Lys Asn Asn Phe Ala Asn Val Asp Glu Ile Leu
 1 5 10 15
 Lys His Ala Ile Lys Tyr Glu Val Asp Ala Val Trp Ala Gly Trp Gly
 20 25 30
 His Ala Ser Glu Asn Pro Asp Leu Pro Arg Arg Leu Asn Asp His Asn
 35 40 45
 Ile Ala Phe Ile Gly Pro Pro Ala Ser Ala Met Phe Ser Leu Gly Asp
 50 55 60
 Lys Ile Ala Ser Thr Ile Ile Ala Gln Thr Val Gly Val Pro Thr Val
 65 70 75 80
 Ala Trp Ser Gly Ser Gly Ile Thr Met Glu
 85 90

<210> 250
 <211> 67
 <212> PRT
 <213> Caenorhabditis elegans

<400> 250
 Val Ile Lys Asn Leu Gly Tyr Met Val Asp Asn His Gly Phe Val Pro
 1 5 10 15
 Asn Gly Gly Arg Val Tyr Tyr Leu Thr Arg Ser Gln Pro Pro Leu Leu
 20 25 30
 Thr Pro Met Val Tyr Glu Tyr Tyr Met Ser Thr Gly Asp Leu Asp Phe
 35 40 45
 Val Met Glu Ile Leu Pro Thr Leu Asp Lys Glu Tyr Glu Phe Trp Ile
 50 55 60
 Lys Asn Arg
 65

<210> 251
 <211> 36
 <212> PRT
 <213> Caenorhabditis elegans

<400> 251
 Ile Asn Gly Phe Val Pro Asn Gly Gly Arg Val Tyr Tyr Leu Arg Ser
 1 5 10 15
 Gln Pro Pro Pro Met Val Tyr Glu Tyr Tyr Thr Asp Val Pro Lys Glu
 20 25 30

Tyr Phe Trp Arg
35

<210> 252
<211> 67
<212> PRT
<213> Caenorhabditis elegans

<400> 252
Met Ile Leu Asn Phe Ala His Ile Ile Glu Thr Tyr Gly Phe Val Pro
1 5 10 15
Asn Gly Gly Arg Val Tyr Tyr Leu Arg Arg Ser Gln Pro Pro Phe Phe
20 25 30
Ala Pro Met Val Tyr Glu Tyr Tyr Leu Ala Thr Gln Asp Ile Gln Leu
35 40 45
Val Ala Asp Leu Ile Pro Val Ile Glu Lys Glu Tyr Thr Phe Trp Ser
50 55 60
Glu Arg Arg
65

<210> 253
<211> 92
<212> PRT
<213> Caenorhabditis elegans

<400> 253
Met Asp Ser Ile Arg Thr Trp Ser Ile Ile Pro Ala Asp Leu Asn Ala
1 5 10 15
Phe Met Cys Ala Asn Ala Arg Ile Leu Ala Ser Leu Tyr Glu Ile Ala
20 25 30
Gly Asp Phe Lys Lys Val Lys Val Phe Glu Gln Arg Tyr Thr Trp Ala
35 40 45
Lys Arg Glu Met Arg Glu Leu His Trp Asn Glu Thr Asp Gly Ile Trp
50 55 60
Tyr Asp Tyr Asp Ile Glu Leu Lys Thr His Ser Asn Gln Tyr Tyr Val
65 70 75 80
Ser Asn Ala Val Pro Leu Tyr Ala Lys Cys Tyr Asp
85 90

<210> 254
<211> 32
<212> PRT
<213> Caenorhabditis elegans

<400> 254
Ile Thr Ile Pro Asp Leu Asn Ala Phe Cys Asn Ile Tyr Gly Lys Arg
1 5 10 15
Thr Trp Tyr Asp Tyr Thr His Ser Asn Ala Val Pro Leu Cys Tyr Asp
20 25 30

<210> 255
<211> 92
<212> PRT
<213> Caenorhabditis elegans

<400> 255
 Ile Ser Thr Ile Glu Thr Thr Asn Ile Val Pro Val Asp Leu Asn Ala
 1 5 10 15
 Phe Leu Cys Tyr Asn Met Asn Ile Met Gln Leu Phe Tyr Lys Leu Thr
 20 25 30
 Gly Asn Pro Leu Lys His Leu Glu Trp Ser Ser Arg Phe Thr Asn Phe
 35 40 45
 Arg Glu Ala Phe Thr Lys Val Phe Tyr Val Pro Ala Arg Lys Gly Trp
 50 55 60
 Tyr Asp Tyr Asn Leu Arg Thr Leu Thr His Asn Thr Asp Phe Phe Ala
 65 70 75 80
 Ser Asn Ala Val Pro Leu Phe Ser Gln Cys Tyr Asp
 85 90

<210> 256
 <211> 102
 <212> PRT
 <213> Caenorhabditis elegans

<400> 256
 Val His Asp Tyr Leu Glu Arg Gln Gly Leu Leu Lys Tyr Thr Lys Gly
 1 5 10 15
 Leu Pro Thr Ser Leu Ala Met Ser Ser Thr Gln Gln Trp Asp Lys Glu
 20 25 30
 Asn Ala Trp Pro Pro Met Ile His Met Val Ile Glu Gly Phe Arg Thr
 35 40 45
 Thr Gly Asp Ile Lys Leu Met Lys Val Ala Glu Lys Met Ala Thr Ser
 50 55 60
 Trp Leu Thr Gly Thr Tyr Gln Ser Phe Ile Arg Thr His Ala Met Phe
 65 70 75 80
 Glu Lys Tyr Asn Val Thr Pro His Thr Glu Glu Thr Ser Gly Gly Gly
 85 90 95
 Gly Gly Glu Tyr Glu Val
 100

<210> 257
 <211> 37
 <212> PRT
 <213> Caenorhabditis elegans

<400> 257
 Val Gly Gly Pro Thr Ser Gln Gln Trp Asp Asn Trp Pro Met His Met
 1 5 10 15
 Ile Glu Gly Arg Leu Ala Ala Trp Leu Gln Phe Met Glu Lys Tyr Asn
 20 25 30
 Val Gly Gly Glu Val
 35

<210> 258
 <211> 102
 <212> PRT
 <213> Caenorhabditis elegans

<400> 258
 Val Tyr Asn Glu Met Gln Asn Ser Gly Ala Phe Ser Ile Pro Gly Gly
 1 5 10 15

Ile	Pro	Thr	Ser	Met	Asn	Glu	Glu	Thr	Asn	Gln	Gln	Trp	Asp	Phe	Pro
			20					25					30		
Asn	Gly	Trp	Ser	Pro	Met	Asn	His	Met	Ile	Ile	Glu	Gly	Leu	Arg	Lys
		35					40					45			
Ser	Asn	Asn	Pro	Ile	Leu	Gln	Gln	Lys	Ala	Phe	Thr	Leu	Ala	Glu	Lys
	50					55					60				
Trp	Leu	Glu	Thr	Asn	Met	Gln	Thr	Phe	Asn	Val	Ser	Asp	Glu	Met	Trp
65					70					75					80
Glu	Lys	Tyr	Asn	Val	Lys	Glu	Pro	Leu	Gly	Lys	Leu	Ala	Thr	Gly	Gly
			85						90					95	
Glu	Tyr	Glu	Val	Gln	Val										
			100												

<210> 259
 <211> 58
 <212> PRT
 <213> Caenorhabditis elegans

Tyr	Gln	Tyr	Lys	Ala	Lys	Leu	Lys	Val	Pro	Arg	Pro	Glu	Ser	Tyr	Arg
1				5					10					15	
Glu	Asp	Ser	Glu	Leu	Ala	Glu	His	Leu	Gln	Thr	Glu	Ala	Glu	Lys	Ile
			20					25					30		
Gln	Met	Trp	Ser	Glu	Ile	Ala	Ser	Ala	Ala	Glu	Thr	Gly	Trp	Asp	Phe
		35					40					45			
Ser	Thr	Arg	Trp	Phe	Ser	Gln	Asn	Gly	Asp						
	50					55									

<210> 260
 <211> 29
 <212> PRT
 <213> Caenorhabditis elegans

Gln	Tyr	Pro	Arg	Pro	Glu	Ser	Arg	Glu	Asp	Ala	Glu	His	Thr	Lys	Gln
1				5					10					15	
Ser	Ala	Ala	Glu	Gly	Trp	Asp	Phe	Ser	Arg	Trp	Phe	Asp			
			20					25							

<210> 261
 <211> 58
 <212> PRT
 <213> Caenorhabditis elegans

Phe	Gln	Tyr	Arg	Thr	Glu	Ala	Glu	Thr	Pro	Arg	Pro	Glu	Ser	Phe	Arg
1				5					10					15	
Glu	Asp	Val	Leu	Ser	Ala	Glu	His	Phe	Thr	Thr	Lys	Asp	Arg	Lys	Lys
			20					25					30		
Gln	Phe	Phe	Lys	Asp	Leu	Gly	Ser	Ala	Ala	Glu	Ser	Gly	Trp	Asp	Phe
		35					40					45			
Ser	Ser	Arg	Trp	Phe	Lys	Asn	His	Lys	Asp						
	50					55									

<210> 262

<211> 21
<212> PRT
<213> Caenorhabditis elegans

<400> 262
Gln Thr Gly Phe Gly Trp Thr Asn Gly Val Ile Leu Asp Leu Leu Asp
1 5 10 15
Lys Tyr Gly Asp Gln
20

<210> 263
<211> 13
<212> PRT
<213> Caenorhabditis elegans

<400> 263
Gln Gly Phe Gly Trp Thr Asn Gly Leu Asp Leu Tyr Asp
1 5 10

<210> 264
<211> 21
<212> PRT
<213> Caenorhabditis elegans

<400> 264
Gln Ala Gly Phe Gly Trp Thr Asn Gly Ala Ala Leu Asp Leu Ile Phe
1 5 10 15
Thr Tyr Ser Asp Arg
20

<210> 265
<211> 24
<212> PRT
<213> Caenorhabditis elegans

<400> 265
Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe Ser Leu Ser Asn Ile Thr
1 5 10 15
Phe Val Val Phe Ile Leu Tyr Ile
20

<210> 266
<211> 10
<212> PRT
<213> Caenorhabditis elegans

<400> 266
Ser Ser Ser Phe Ser Val Phe Leu Tyr Ile
1 5 10

<210> 267
<211> 24
<212> PRT
<213> Caenorhabditis elegans

<400> 267
 Thr Ser Ser Ser Ser Ser Thr Phe Gly Tyr Ser Asn Ile Leu Thr Leu
 1 5 10 15
 Ile Thr Val Phe Val Leu Tyr Ile
 20

<210> 268
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 268
 Gly Gly Glu Tyr Glu Val Gln
 1 5

<210> 269
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 269
 Gly Gly Glu Tyr Glu Val Gln
 1 5

<210> 270
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 270
 Gly Gly Glu Tyr Glu Val Gln
 1 5

<210> 271
 <211> 18
 <212> PRT
 <213> Caenorhabditis elegans

<400> 271
 Lys Thr His Ser Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr
 1 5 10 15
 Ala Lys

<210> 272
 <211> 8
 <212> PRT
 <213> Caenorhabditis elegans

<400> 272
 Lys Tyr Tyr Val Ser Pro Tyr Lys
 1 5

<210> 273
 <211> 18
 <212> PRT
 <213> Caenorhabditis elegans

<400> 273
 Lys Phe Thr Ala His Pro Tyr Tyr Val Ser Arg Thr Pro Pro Arg Tyr
 1 5 10 15
 His Lys

<210> 274
 <211> 67
 <212> PRT
 <213> Caenorhabditis elegans

<400> 274
 Val Ile Lys Asn Leu Gly Tyr Met Val Asp Asn His Gly Phe Val Pro
 1 5 10 15
 Asn Gly Gly Arg Val Tyr Tyr Leu Thr Arg Ser Gln Pro Pro Leu Leu
 20 25 30
 Thr Pro Met Val Tyr Glu Tyr Tyr Met Ser Thr Gly Asp Leu Asp Phe
 35 40 45
 Val Met Glu Ile Leu Pro Thr Leu Asp Lys Glu Tyr Glu Phe Trp Ile
 50 55 60
 Lys Asn Arg
 65

<210> 275
 <211> 43
 <212> PRT
 <213> Caenorhabditis elegans

<400> 275
 Ile Asn Leu Met Val Asp Gly Phe Val Pro Asn Gly Gly Arg Val Tyr
 1 5 10 15
 Tyr Leu Arg Ser Gln Pro Pro Leu Met Val Tyr Glu Tyr Thr Asp Phe
 20 25 30
 Val Glu Leu Pro Thr Leu Lys Glu Phe Trp Arg
 35 40

<210> 276
 <211> 67
 <212> PRT
 <213> Caenorhabditis elegans

<400> 276
 Met Ile Arg Asn Leu Ala Ser Met Val Asp Lys Tyr Gly Phe Val Pro
 1 5 10 15
 Asn Gly Gly Arg Val Tyr Tyr Leu Gln Arg Ser Gln Pro Pro Phe Leu
 20 25 30
 Ala Ala Met Val Tyr Glu Leu Tyr Glu Ala Thr Asn Asp Lys Ala Phe
 35 40 45
 Val Ala Glu Leu Leu Pro Thr Leu Leu Lys Glu Leu Asn Phe Trp Asn
 50 55 60
 Glu Lys Arg

65

<210> 277
<211> 84
<212> PRT
<213> *Caenorhabditis elegans*

<400> 277
Ile Ile Pro Ala Asp Leu Asn Ala Phe Met Cys Ala Asn Ala Arg Ile
1 5 10 15
Leu Ala Ser Leu Tyr Glu Ile Ala Gly Asp Phe Lys Lys Val Lys Val
20 25 30
Phe Glu Gln Arg Tyr Thr Trp Ala Lys Arg Glu Met Arg Glu Leu His
35 40 45
Trp Asn Glu Thr Asp Gly Ile Trp Tyr Asp Tyr Asp Ile Glu Leu Lys
50 55 60
Thr His Ser Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr Ala
65 70 75 80
Lys Cys Tyr Asp

<210> 278
<211> 31
<212> PRT
<213> *Caenorhabditis elegans*

<400> 278
Pro Asp Leu Asn Cys Asn Ile Leu Tyr Glu Gly Asp Lys Phe Asn Thr
1 5 10 15
Asp Gly Trp Tyr Asp Tyr His Tyr Ser Ala Val Pro Leu Cys Tyr
20 25 30

<210> 279
<211> 84
<212> PRT
<213> *Caenorhabditis elegans*

<400> 279
Val Leu Pro Val Asp Leu Asn Gly Leu Leu Cys Trp Asn Met Asp Ile
1 5 10 15
Met Glu Tyr Leu Tyr Glu Gln Ile Gly Asp Thr Lys Asn Ser Gln Ile
20 25 30
Phe Arg Asn Lys Arg Ala Asp Phe Arg Asp Thr Val Gln Asn Val Phe
35 40 45
Tyr Asn Arg Thr Asp Gly Thr Trp Tyr Asp Tyr Asn Leu Arg Thr Gln
50 55 60
Ser His Asn Pro Arg Phe Tyr Thr Ser Thr Ala Val Pro Leu Phe Thr
65 70 75 80
Asn Cys Tyr Asn

<210> 280
<211> 48
<212> PRT
<213> *Caenorhabditis elegans*

<400> 280
 Tyr Leu Glu Arg Gln Gly Leu Leu Lys Tyr Thr Lys Gly Leu Pro Thr
 1 5 10 15
 Ser Leu Ala Met Ser Ser Thr Gln Gln Trp Asp Lys Glu Asn Ala Trp
 20 25 30
 Pro Pro Met Ile His Met Val Ile Glu Gly Phe Arg Thr Thr Gly Asp
 35 40 45

<210> 281
 <211> 20
 <212> PRT
 <213> Caenorhabditis elegans

<400> 281
 Gly Tyr Gly Pro Thr Ser Ser Gln Gln Trp Asp Asn Trp Pro His Met
 1 5 10 15
 Ile Glu Gly Arg
 20

<210> 282
 <211> 48
 <212> PRT
 <213> Caenorhabditis elegans

<400> 282
 Phe Phe Gln Lys Met Gly Val Phe Thr Tyr Pro Gly Gly Ile Pro Thr
 1 5 10 15
 Ser Met Ser Gln Glu Ser Asp Gln Gln Trp Asp Phe Pro Asn Gly Trp
 20 25 30
 Ser Pro Asn Asn His Met Ile Ile Glu Gly Leu Arg Lys Ser Ala Asn
 35 40 45

<210> 283
 <211> 18
 <212> PRT
 <213> Caenorhabditis elegans

<400> 283
 Glu Ile Ala Ser Ala Ala Glu Thr Gly Trp Asp Phe Ser Thr Arg Trp
 1 5 10 15
 Phe Ser

<210> 284
 <211> 15
 <212> PRT
 <213> Caenorhabditis elegans

<400> 284
 Ala Ser Ala Ala Glu Gly Trp Asp Phe Ser Thr Arg Trp Phe Ser
 1 5 10 15

<210> 285
 <211> 18

<212> PRT
 <213> Caenorhabditis elegans
 <400> 285
 Asp Leu Ala Ser Ala Ala Glu Ser Gly Trp Asp Phe Ser Thr Arg Trp
 1 5 10 15
 Phe Ser

<210> 286
 <211> 40
 <212> PRT
 <213> Caenorhabditis elegans

<400> 286
 Lys Gln Phe Pro Tyr Tyr Gln Tyr Lys Ala Lys Leu Lys Val Pro Arg
 1 5 10 15
 Pro Glu Ser Tyr Arg Glu Asp Ser Glu Leu Ala Glu His Leu Gln Thr
 20 25 30
 Glu Ala Glu Lys Ile Gln Met Trp
 35 40

<210> 287
 <211> 18
 <212> PRT
 <213> Caenorhabditis elegans

<400> 287
 Lys Phe Tyr Gln Tyr Lys Val Pro Arg Pro Glu Ser Tyr Arg Asp Leu
 1 5 10 15
 Ala Gln

<210> 288
 <211> 40
 <212> PRT
 <213> Caenorhabditis elegans

<400> 288
 Lys Ser Phe Lys Val Tyr Gln Tyr Lys Thr Ala Ser Asn Val Pro Arg
 1 5 10 15
 Pro Glu Ser Tyr Arg Val Asp Thr Gln Asn Ser Ala Lys Leu Ala Asn
 20 25 30
 Gly Ala Asp Gln Gln Gln Phe Tyr
 35 40

<210> 289
 <211> 21
 <212> PRT
 <213> Caenorhabditis elegans

<400> 289
 Gln Thr Gly Phe Gly Trp Thr Asn Gly Val Ile Leu Asp Leu Leu Asp
 1 5 10 15
 Lys Tyr Gly Asp Gln

<210> 290
 <211> 14
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 290
 Gln Gly Phe Gly Trp Asn Gly Ile Leu Asp Leu Leu Tyr Asp
 1 5 10

<210> 291
 <211> 21
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 291
 Gln Asp Gly Phe Gly Trp Ser Asn Gly Ala Ile Leu Asp Leu Leu Leu
 1 5 10 15
 Thr Tyr Asn Asp Arg
 20

<210> 292
 <211> 27
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 292
 Tyr Gly Asp Gln Phe Ala Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe
 1 5 10 15
 Ser Leu Ser Asn Ile Thr Phe Val Val Phe Ile
 20 25

<210> 293
 <211> 11
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 293
 Tyr Phe Ala Ser Ser Ser Ala Ser Phe Ser Phe
 1 5 10

<210> 294
 <211> 26
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 294
 Tyr Asn Pro Phe Ala Ser Ser Ser Asp Ala Ser Ser Cys Pro Phe Ser
 1 5 10 15
 Thr Asn Ser Val Ile Phe Ser Ile Leu Val
 20 25

<210> 295
<211> 9
<212> PRT
<213> Caenorhabditis elegans

<400> 295
Gly Gly Gly Gly Glu Tyr Glu Val Gln
1 5

<210> 296
<211> 7
<212> PRT
<213> Caenorhabditis elegans

<400> 296
Gly Gly Gly Glu Tyr Val Gln
1 5

<210> 297
<211> 9
<212> PRT
<213> Caenorhabditis elegans

<400> 297
Gly Ser Gly Gly Glu Tyr Asp Val Gln
1 5

<210> 298
<211> 14
<212> PRT
<213> Caenorhabditis elegans

<400> 298
Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr Ala Lys
1 5 10

<210> 299
<211> 7
<212> PRT
<213> Caenorhabditis elegans

<400> 299
Asn Tyr Tyr Val Leu Tyr Lys
1 5

<210> 300
<211> 14
<212> PRT
<213> Caenorhabditis elegans

<400> 300
Asn His Tyr Tyr Ile Ile Gln Met Val Ser Leu Tyr Thr Lys
1 5 10

<210> 301
 <211> 30
 <212> PRT
 <213> Caenorhabditis elegans

<400> 301
 Asp Gln Phe Ala Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe Ser Leu
 1 5 10 15
 Ser Asn Ile Thr Phe Val Val Phe Ile Leu Tyr Ile Phe Ser
 20 25 30

<210> 302
 <211> 11
 <212> PRT
 <213> Caenorhabditis elegans

<400> 302
 Asp Gln Phe Ser Ser Lys Phe Ser Phe Phe Ser
 1 5 10

<210> 303
 <211> 30
 <212> PRT
 <213> Caenorhabditis elegans

<400> 303
 Asp Gln Phe Val Ile Ser Phe Ile Cys Ser Lys Phe Ser Ser Lys Asn
 1 5 10 15
 Lys Lys Leu Tyr Phe Cys Pro Ser His Phe Ser Leu Phe Ser
 20 25 30

<210> 304
 <211> 9
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(9)
 <223> Xaa = Any Amino Acid

<400> 304
 Gly Trp Asp Xaa Xaa Ile Ala Pro Lys
 1 5

<210> 305
 <211> 62
 <212> PRT
 <213> Mus musculus

<400> 305
 Leu Cys Lys Glu Gly Ile Ser Asp Gly Ala Thr Met Lys Thr Phe Cys
 1 5 10 15
 Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu Glu Asp Asn Asp Tyr
 20 25 30

Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly	Val	Val	Met	Tyr	Glu	Met
		35					40					45			
Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln	Asp	His	Glu	Arg		
	50					55					60				

<210> 306
 <211> 9
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 306
 Gln Ala Leu Thr Gln Met Asn Pro Lys
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 35 40 45
 Gln Thr Gln Gln Phe Leu Thr Arg Arg His Gly Lys Gly Asn Val Lys
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 Val Phe Asn Leu Arg Gly Gly Tyr Tyr Tyr Asp Ala Asp Asn Phe Asp
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 Gly Asn Val Ile Cys Phe Asp Met Thr Asp His His Pro Pro Ser Leu
 85 90 95
 Glu Leu Met Ala Pro Phe Cys Arg Glu Ala Lys Glu Trp Leu Glu Ala
 100 105 110
 Asp Asp Lys His Val Ile Ala Val His Cys Lys Ala Gly Lys Gly Arg
 115 120 125
 Thr Gly Val Met Ile Cys Ala Leu Leu Ile Tyr Ile Asn Phe Tyr Pro
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 Ser Pro Arg Gln Ile Leu Asp Tyr Tyr Ser Ile Ile Thr Arg Lys Asn
 145 150 155 160
 Asn Lys Gly Val Thr Ile Pro Ser Gln Arg Tyr Ile Tyr Tyr Tyr
 165 170 175
 His Lys Leu Arg Glu Arg Glu Leu Asn Tyr Leu Pro Leu Arg Met Gln
 180 185 190
 Leu Ile Gly Val Tyr Val Glu Arg Pro Pro Lys Thr Trp Gly Gly Gly
 195 200 205
 Ser Lys Ile Lys Val Glu Val Gly Asn Gly Ser Thr Ile Leu Phe Lys

210		215		220
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Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His Tyr Lys Ile	
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Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys Phe Asn Cys	
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Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro Gln Leu Glu	
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Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Val Tyr Tyr Tyr Ser	
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Tyr Leu Leu Lys Asn His Leu Asp Tyr Arg Pro Val Ala Leu Leu Phe	
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His Lys Met Met Phe Glu Thr Ile Pro Met Phe Ser Gly Gly Thr Cys	
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Ala	Glu	Glu	His	Val	Leu	Thr	Phe	Pro	Val	Tyr	Glu	Met	Asp	Arg	Ala	
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 <213> *Caenorhabditis elegans*

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 <212> DNA

<213> *Caenorhabditis elegans*

<400> 314

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<211> 45

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<400> 315

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Met Asp Ser Leu Phe Gln Met Ala Ser Ala Met Lys Phe Gln Tyr Tyr
 1           5           10           15
Ser Lys Lys Ala Ala Gly Lys Thr Met Ser Asn Ser Val Lys Asn Trp
          20           25           30
Ile Pro Cys Ser Pro Ser Arg Arg Ile Leu Ile Ser Ser
          35           40           45
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<210> 316

<211> 466

<212> DNA

<213> *Caenorhabditis elegans*

<400> 316

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gggtctggag tgcgacgaga ctcaagcgag tcccgtctgt gccgatatcc cctcacagtg      120
gactttgagg ctttcggctg ggactggatc atcgcaccta agcgctacaa ggccaactac      180
tgctccggcc agtgggagta catgttcatg caaaaatatc cgcataccca tttggtgcag      240
caggccaatc caagagggtta tgctgggccc tgttgtagcc ccaccaagat gtccccaatc      300
aacatgctct acttcaatga caagcagcag attatctacg gcaagatccc tggcatgggtg      360
gtggatcgct gtggctgctc ttaagggtgg ggatagagga tgcttcccc acagaccgta      420
ccccaagacc catagccctg cccaatccac cgctgatcc aaacat      466
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<210> 317

<211> 128

<212> PRT

<213> *Caenorhabditis elegans*

<400> 317

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Ile Arg His Glu His Gly Ala Ser Ser Pro Arg Glu His Lys Thr Phe
 1           5           10           15
Pro Ala Glu Pro Gly Ser Gly Leu Arg Arg Asp Ser Ser Glu Ser Arg
          20           25           30
Cys Cys Arg Tyr Pro Leu Thr Val Asp Phe Glu Ala Phe Gly Trp Asp
          35           40           45
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Trp	Ile	Ile	Ala	Pro	Lys	Arg	Tyr	Lys	Ala	Asn	Tyr	Cys	Ser	Gly	Gln
	50					55				60					
Trp	Glu	Tyr	Met	Phe	Met	Gln	Lys	Tyr	Pro	His	Thr	His	Leu	Val	Gln
65					70					75					80
Gln	Ala	Asn	Pro	Arg	Gly	Tyr	Ala	Gly	Pro	Cys	Cys	Thr	Pro	Thr	Lys
				85					90					95	
Met	Ser	Pro	Ile	Asn	Met	Leu	Tyr	Phe	Asn	Asp	Lys	Gln	Gln	Ile	Ile
			100					105					110		
Tyr	Gly	Lys	Ile	Pro	Leu	Ala	Met	Val	Val	Asp	Arg	Cys	Gly	Cys	Ser
		115					120					125			

<210> 318
 <211> 8
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 6
 <223> n = c or t

<400> 318
 caaaaanaa 8

<210> 319
 <211> 20
 <212> DNA
 <213> Caenorhabditis elegans

<400> 319
 ccactatggc cgagatttcc 20

<210> 320
 <211> 44
 <212> DNA
 <213> Caenorhabditis elegans

<400> 320
 ccagtgaaaa gttcttctcc tttcttcctc ttctcgaatt cgga 44

<210> 321
 <211> 21
 <212> DNA
 <213> Caenorhabditis elegans

<400> 321
 cttcctcttc tcgaattcgg c 21

<210> 322
 <211> 8
 <212> PRT
 <213> Caenorhabditis elegans

<400> 322
 Gly Arg Lys Gly Phe Pro His Val
 1 5

<210> 323
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(7)
 <223> Xaa = Any Amino Acid

<400> 323
 Arg Xaa Xaa Ile Xaa Xaa Gly
 1 5

<210> 324
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

<400> 324
 Cys Gly Cys Cys Cys Cys Cys
 1 5

<210> 325
 <211> 79
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 325
 Val Leu Asp Asp Tyr Gly Arg Val Asp Trp Trp Gly Gly Val Val Met
 1 5 10 15
 Tyr Glu Met Met Cys Gly Arg Leu Pro Phe Tyr Asp His Lys Leu Phe
 20 25 30
 Glu Leu Ile Arg Phe Pro Leu Glu Ala Leu Leu Gly Leu Leu Lys Asp
 35 40 45
 Pro Thr Gln Arg Leu Gly Gly Glu Asp Ala Glu Ile Phe Phe Trp
 50 55 60
 Tyr Lys Pro Pro Lys Pro Val Ser Glu Thr Asp Thr Tyr Phe Asp
 65 70 75

<210> 326
 <211> 48
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 326
 Thr Met Phe Leu Lys Leu Gly Lys Gly Thr Phe Gly Lys Val Ile Leu
 1 5 10 15
 Lys Glu Lys Thr Tyr Ala Lys Ile Leu Lys Lys Val Ile Ala Glu Val
 20 25 30
 Ala His Thr Leu Thr Glu Asn Arg Val Leu Gln His Pro Phe Leu Thr
 35 40 45

<210> 327
 <211> 27

<212> DNA
 <213> *Caenorhabditis elegans*

<400> 327
 caagcgttga ctcaaataaa tccaaaa

27

<210> 328
 <211> 55
 <212> DNA
 <213> *Caenorhabditis elegans*

<400> 328
 caagcgttga ctcaatgcgt tgactcaatg cggttgactcg ttgacgaatc caaaa

55

<210> 329
 <211> 530
 <212> PRT
 <213> *C. elegans*

<400> 329
 Met Asn Asp Ser Ile Asp Asp Asp Phe Pro Pro Glu Pro Arg Gly Arg
 1 5 10 15
 Cys Tyr Thr Trp Pro Met Gln Gln Tyr Ile Tyr Gln Glu Ser Ser Ala
 20 25 30
 Thr Ile Pro His His His Leu Asn Gln His Asn Asn Pro Tyr His Pro
 35 40 45
 Met His Pro His His Gln Leu Pro His Met Gln Gln Leu Pro Gln Pro
 50 55 60
 Leu Leu Asn Leu Asn Met Thr Thr Leu Thr Ser Ser Gly Ser Ser Val
 65 70 75 80
 Ala Ser Ser Ile Gly Gly Gly Ala Gln Cys Ser Pro Cys Ala Ser Gly
 85 90 95
 Ser Ser Thr Ala Ala Thr Asn Ser Ser Gln Gln Gln Gln Thr Val Gly
 100 105 110
 Gln Met Leu Ala Ala Ser Val Pro Cys Ser Ser Ser Gly Met Thr Leu
 115 120 125
 Gly Met Ser Leu Asn Leu Ser Gln Gly Gly Gly Pro Met Pro Ala Lys
 130 135 140
 Lys Lys Arg Cys Arg Lys Lys Pro Thr Asp Gln Leu Ala Gln Lys Lys
 145 150 155 160
 Pro Asn Pro Trp Gly Glu Glu Ser Tyr Ser Asp Ile Ile Ala Lys Ala
 165 170 175
 Leu Glu Ser Ala Pro Asp Gly Arg Leu Lys Leu Asn Glu Ile Tyr Gln
 180 185 190
 Trp Phe Ser Asp Asn Ile Pro Tyr Phe Gly Glu Arg Ser Ser Pro Glu
 195 200 205
 Glu Ala Ala Gly Trp Lys Asn Ser Ile Arg His Asn Leu Ser Leu His
 210 215 220
 Ser Arg Phe Met Arg Ile Gln Asn Glu Gly Ala Gly Lys Ser Ser Trp
 225 230 235 240
 Trp Val Ile Asn Pro Asp Ala Lys Pro Gly Arg Asn Pro Arg Arg Thr
 245 250 255
 Arg Glu Arg Ser Asn Thr Ile Glu Thr Thr Lys Ala Gln Leu Glu
 260 265 270
 Lys Ser Arg Arg Gly Ala Lys Lys Arg Ile Lys Glu Arg Ala Leu Met
 275 280 285
 Gly Ser Leu His Ser Thr Leu Asn Gly Asn Ser Ile Ala Gly Ser Ile
 290 295 300
 Gln Thr Ile Ser His Asp Leu Tyr Asp Asp Asp Ser Met Gln Gly Ala

305					310					315				320
Phe	Asp	Asn	Val	Pro	Ser	Ser	Phe	Arg	Pro	Arg	Thr	Gln	Ser	Asn
				325					330					335
Ser	Ile	Pro	Gly	Ser	Ser	Ser	Arg	Val	Ser	Pro	Ala	Ile	Gly	Ser
			340					345					350	
Ile	Tyr	Asp	Asp	Leu	Glu	Phe	Pro	Ser	Trp	Val	Gly	Glu	Ser	Val
		355					360					365		
Ala	Ile	Pro	Ser	Asp	Ile	Val	Asp	Arg	Thr	Asp	Gln	Met	Arg	Ile
		370				375					380			
Ala	Thr	Thr	His	Ile	Gly	Gly	Val	Gln	Ile	Lys	Gln	Glu	Ser	Lys
385					390					395				400
Ile	Lys	Thr	Glu	Pro	Ile	Ala	Pro	Pro	Pro	Ser	Tyr	His	Glu	Leu
				405					410					415
Ser	Val	Arg	Gly	Ser	Cys	Ala	Gln	Asn	Pro	Leu	Leu	Arg	Asn	Pro
			420					425					430	
Val	Pro	Ser	Thr	Asn	Phe	Lys	Pro	Met	Pro	Leu	Pro	Gly	Ala	Tyr
		435					440					445		
Asn	Tyr	Gln	Asn	Gly	Gly	Ile	Thr	Pro	Ile	Asn	Trp	Leu	Ser	Thr
	450					455					460			
Asn	Ser	Ser	Pro	Leu	Pro	Gly	Ile	Gln	Ser	Cys	Gly	Ile	Val	Ala
465					470					475				480
Gln	His	Thr	Val	Ala	Ser	Ser	Ser	Ala	Leu	Pro	Ile	Asp	Leu	Glu
				485					490					495
Leu	Thr	Leu	Pro	Asp	Gln	Pro	Leu	Met	Asp	Thr	Met	Asp	Val	Asp
			500				505						510	
Leu	Ile	Arg	His	Glu	Leu	Ser	Gln	Ala	Gly	Gly	Gln	His	Ile	His
		515					520					525		
Asp	Leu													
	530													

<210> 330
 <211> 673
 <212> PRT
 <213> Homo sapiens

<400> 330

Met	Ala	Glu	Ala	Pro	Ala	Ser	Pro	Ala	Pro	Leu	Ser	Pro	Leu	Glu	Val
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Glu	Leu	Asp	Pro	Glu	Phe	Glu	Pro	Gln	Ser	Arg	Pro	Arg	Ser	Cys	Thr
			20					25					30		
Trp	Pro	Leu	Gln	Arg	Pro	Glu	Leu	Gln	Ala	Ser	Pro	Ala	Lys	Pro	Ser
		35					40					45			
Gly	Glu	Thr	Ala	Ala	Asp	Ser	Met	Ile	Pro	Glu	Glu	Glu	Asp	Asp	Glu
	50					55					60				
Asp	Asp	Glu	Asp	Gly	Gly	Gly	Arg	Ala	Gly	Ser	Ala	Met	Ala	Ile	Gly
65					70				75					80	
Gly	Gly	Gly	Gly	Ser	Gly	Thr	Leu	Gly	Ser	Gly	Leu	Leu	Leu	Glu	Asp
				85				90						95	
Ser	Ala	Arg	Val	Leu	Ala	Pro	Gly	Gly	Gln	Asp	Pro	Gly	Ser	Gly	Pro
			100				105						110		
Ala	Thr	Ala	Ala	Gly	Gly	Leu	Ser	Gly	Gly	Thr	Gln	Ala	Leu	Leu	Gln
		115					120					125			
Pro	Gln	Gln	Pro	Leu	Pro	Pro	Pro	Gln	Pro	Gly	Ala	Ala	Gly	Gly	Ser
	130					135					140				
Gly	Gln	Pro	Arg	Lys	Cys	Ser	Ser	Arg	Arg	Asn	Ala	Trp	Gly	Asn	Leu
145				150					155					160	
Ser	Tyr	Ala	Asp	Leu	Ile	Thr	Arg	Ala	Ile	Glu	Ser	Ser	Pro	Asp	Lys
				165					170					175	

Arg	Leu	Thr	Leu	Ser	Gln	Ile	Tyr	Glu	Trp	Met	Val	Arg	Cys	Val	Pro
			180					185					190		
Tyr	Phe	Lys	Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly	Trp	Lys	Asn
		195					200					205			
Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	His	Ser	Arg	Phe	Met	Arg	Val	Gln
	210					215					220				
Asn	Glu	Gly	Thr	Gly	Lys	Ser	Ser	Trp	Trp	Ile	Ile	Asn	Pro	Asp	Gly
225					230					235					240
Gly	Lys	Ser	Gly	Lys	Ala	Pro	Arg	Arg	Arg	Ala	Val	Ser	Met	Asp	Asn
				245				250						255	
Ser	Asn	Lys	Tyr	Thr	Lys	Ser	Arg	Gly	Arg	Ala	Ala	Lys	Lys	Lys	Ala
			260					265					270		
Ala	Leu	Gln	Thr	Ala	Pro	Glu	Ser	Ala	Asp	Asp	Ser	Pro	Ser	Gln	Leu
		275					280					285			
Ser	Lys	Trp	Pro	Gly	Ser	Pro	Thr	Ser	Arg	Ser	Ser	Asp	Glu	Leu	Asp
	290					295					300				
Ala	Trp	Thr	Asp	Phe	Arg	Ser	Arg	Thr	Asn	Ser	Asn	Ala	Ser	Thr	Val
305					310					315					320
Ser	Gly	Arg	Leu	Ser	Pro	Ile	Met	Ala	Ser	Thr	Glu	Leu	Asp	Glu	Val
				325				330						335	
Gln	Asp	Asp	Asp	Ala	Pro	Leu	Ser	Pro	Met	Leu	Tyr	Ser	Ser	Ser	Ala
			340					345					350		
Ser	Leu	Ser	Pro	Ser	Val	Ser	Lys	Pro	Cys	Thr	Val	Glu	Leu	Pro	Arg
		355					360					365			
Leu	Thr	Asp	Met	Ala	Gly	Thr	Met	Asn	Leu	Asn	Asp	Gly	Leu	Thr	Glu
	370					375					380				
Asn	Leu	Met	Asp	Asp	Leu	Leu	Asp	Asn	Ile	Thr	Leu	Pro	Pro	Ser	Gln
385					390					395					400
Pro	Ser	Pro	Thr	Gly	Gly	Leu	Met	Gln	Arg	Ser	Ser	Ser	Phe	Pro	Tyr
				405				410						415	
Thr	Thr	Lys	Gly	Ser	Gly	Leu	Gly	Ser	Pro	Thr	Ser	Ser	Phe	Asn	Ser
			420					425					430		
Thr	Val	Phe	Gly	Pro	Ser	Ser	Leu	Asn	Ser	Leu	Arg	Gln	Ser	Pro	Met
		435					440					445			
Gln	Thr	Ile	Gln	Glu	Asn	Lys	Pro	Ala	Thr	Phe	Ser	Ser	Met	Ser	His
	450					455					460				
Tyr	Gly	Asn	Gln	Thr	Leu	Gln	Asp	Leu	Leu	Thr	Ser	Asp	Ser	Leu	Ser
465					470					475					480
His	Ser	Asp	Val	Met	Met	Thr	Gln	Ser	Asp	Pro	Leu	Met	Ser	Gln	Ala
				485					490					495	
Ser	Thr	Ala	Val	Ser	Ala	Gln	Asn	Ser	Arg	Arg	Asn	Val	Met	Leu	Arg
		500						505					510		
Asn	Asp	Pro	Met	Met	Ser	Phe	Ala	Ala	Gln	Pro	Asn	Gln	Gly	Ser	Leu
		515					520					525			
Val	Asn	Gln	Asn	Leu	Leu	His	His	Gln	His	Gln	Thr	Gln	Gly	Ala	Leu
	530					535					540				
Gly	Gly	Ser	Arg	Ala	Leu	Ser	Asn	Ser	Val	Ser	Asn	Met	Gly	Leu	Ser
545					550					555					560
Glu	Ser	Ser	Ser	Leu	Gly	Ser	Ala	Lys	His	Gln	Gln	Gln	Ser	Pro	Val
				565				570						575	
Ser	Gln	Ser	Met	Gln	Thr	Leu	Ser	Asp	Ser	Leu	Ser	Gly	Ser	Ser	Leu
			580					585					590		
Tyr	Ser	Thr	Ser	Ala	Asn	Leu	Pro	Val	Met	Gly	His	Glu	Lys	Phe	Pro
		595				600						605			
Ser	Asp	Leu	Asp	Leu	Asp	Met	Phe	Asn	Gly	Ser	Leu	Glu	Cys	Asp	Met
	610					615					620				
Glu	Ser	Ile	Ile	Arg	Ser	Glu	Leu	Met	Asp	Ala	Asp	Gly	Leu	Asp	Phe
625					630					635					640
Asn	Phe	Asp	Ser	Leu	Ile	Ser	Thr	Gln	Asn	Val	Val	Gly	Leu	Asn	Val

				645					650					655			
Gly	Asn	Phe	Thr	Gly	Ala	Lys	Gln	Ala	Ser	Ser	Gln	Ser	Trp	Val	Pro		
			660					665					670				
Gly																	

<210> 331
 <211> 501
 <212> PRT
 <213> Homo sapiens

<400> 331

Met	Arg	Ile	Gln	Pro	Gln	Lys	Ala	Ala	Ala	Ile	Ile	Asp	Leu	Asp	Pro		
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Asp	Phe	Glu	Pro	Gln	Ser	Arg	Pro	Arg	Ser	Cys	Thr	Trp	Pro	Leu	Pro		
			20					25					30				
Arg	Pro	Glu	Ile	Ala	Asn	Gln	Pro	Ser	Glu	Pro	Pro	Glu	Val	Glu	Pro		
			35				40					45					
Asp	Leu	Gly	Glu	Lys	Val	His	Thr	Glu	Gly	Arg	Ser	Glu	Pro	Ile	Leu		
	50					55					60						
Leu	Pro	Ser	Arg	Leu	Ser	Glu	Pro	Ala	Gly	Gly	Pro	Gln	Pro	Gly	Ile		
65					70					75					80		
Leu	Gly	Ala	Val	Thr	Gly	Pro	Arg	Lys	Gly	Gly	Ser	Arg	Arg	Asn	Ala		
				85					90					95			
Trp	Gly	Asn	Gln	Ser	Tyr	Ala	Glu	Phe	Ile	Ser	Gln	Ala	Ile	Glu	Ser		
			100					105					110				
Ala	Pro	Glu	Lys	Arg	Leu	Thr	Leu	Ala	Gln	Ile	Tyr	Glu	Trp	Met	Val		
			115				120					125					
Arg	Thr	Val	Pro	Tyr	Phe	Lys	Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala		
						135					140						
Gly	Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	His	Ser	Lys	Phe		
145					150					155					160		
Ile	Lys	Val	His	Asn	Glu	Ala	Thr	Gly	Lys	Ser	Ser	Trp	Trp	Met	Leu		
				165					170					175			
Asn	Pro	Glu	Gly	Lys	Ser	Gly	Lys	Ala	Pro	Arg	Arg	Arg	Ala	Ala			
			180				185						190				
Ser	Met	Asp	Ser	Ser	Ser	Lys	Leu	Leu	Arg	Gly	Arg	Ser	Lys	Ala	Pro		
		195					200					205					
Lys	Lys	Lys	Pro	Ser	Val	Leu	Pro	Ala	Pro	Pro	Glu	Gly	Ala	Thr	Pro		
						215					220						
Thr	Ser	Pro	Val	Gly	His	Phe	Ala	Lys	Trp	Ser	Gly	Ser	Pro	Cys	Ser		
225					230					235					240		
Arg	Asn	Arg	Glu	Glu	Ala	Asp	Met	Trp	Thr	Thr	Phe	Arg	Pro	Arg	Ser		
				245						250					255		
Ser	Ser	Asn	Ala	Ser	Ser	Val	Ser	Thr	Arg	Leu	Ser	Pro	Leu	Arg	Pro		
			260					265					270				
Glu	Ser	Glu	Val	Leu	Ala	Glu	Glu	Ile	Pro	Ala	Ser	Val	Ser	Ser	Tyr		
			275				280					285					
Ala	Gly	Gly	Val	Pro	Pro	Thr	Leu	Asn	Glu	Gly	Leu	Glu	Leu	Leu	Asp		
			290			295					300						
Gly	Leu	Asn	Leu	Thr	Ser	His	Ser	Leu	Leu	Ser	Arg	Ser	Gly	Leu			
305					310				315						320		
Ser	Gly	Phe	Ser	Leu	Gln	His	Pro	Gly	Val	Thr	Gly	Pro	Leu	His	Thr		
				325					330					335			
Tyr	Ser	Ser	Ser	Leu	Phe	Ser	Pro	Ala	Glu	Gly	Pro	Leu	Ser	Ala	Gly		
			340					345					350				
Glu	Gly	Cys	Phe	Ser	Ser	Ser	Gln	Ala	Leu	Glu	Ala	Leu	Leu	Thr	Ser		
		355					360					365					

Asp	Thr	Pro	Pro	Pro	Pro	Ala	Asp	Val	Leu	Met	Thr	Gln	Val	Asp	Pro
	370					375					380				
Ile	Leu	Ser	Gln	Ala	Pro	Thr	Leu	Leu	Leu	Leu	Gly	Gly	Leu	Pro	Ser
385					390					395					400
Ser	Ser	Lys	Leu	Ala	Thr	Gly	Val	Gly	Leu	Cys	Pro	Lys	Pro	Leu	Glu
				405					410					415	
Ala	Arg	Gly	Pro	Ser	Ser	Leu	Val	Pro	Thr	Leu	Ser	Met	Ile	Ala	Pro
			420					425					430		
Pro	Pro	Val	Met	Ala	Ser	Ala	Pro	Ile	Pro	Lys	Ala	Leu	Gly	Thr	Pro
		435					440					445			
Val	Leu	Thr	Pro	Pro	Thr	Glu	Ala	Ala	Ser	Gln	Asp	Arg	Met	Pro	Gln
	450					455					460				
Asp	Leu	Asp	Leu	Asp	Met	Tyr	Met	Glu	Asn	Leu	Glu	Cys	Asp	Met	Asp
465					470					475					480
Asn	Ile	Ile	Ser	Asp	Leu	Met	Asp	Glu	Gly	Glu	Gly	Leu	Asp	Phe	Asn
				485					490					495	
Phe	Glu	Pro	Asp	Pro											
			500												